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Making Room for Managers in Whitehall

SIR DEREK RAYNER

In January of this year, a group of senior officials of Government Departments, including a number of heads of large executive organizations within the Civil Service, met under the chairmanship of Sir William Armstrong at the Civil Service College, Sunningdale, to discuss the problems and challenges presented by the movement towards accountable management in the service. The article that follows is the first of a series of three based on talks given at this forum. Its author, Sir Derek Rayner, was formerly Chief Executive of the Procurement Executive, Ministry of Defence. The second article in the series, by Mr. Howell Leadbeater, Controller of Supplies in the Property Services Agency, Department of the Environment, will be published in the August edition; and the November edition will include one by Mr. Kenneth Cooper, Chief Executive of the Employment Services Agency.—*Editor.*

Within Whitehall lies the responsibility for the management of businesses of a scale and of a diversity which are comparable to the largest in the private sector. Within Whitehall there clearly are managers of a very high calibre, as these massive businesses are run with an overall efficiency that compares favourably with most of the private sector. However, in my opinion they fail to match the best of management achievements of the private sector, not because they do not possess the management ability, and certainly not because they are not dedicated to their tasks, but principally because the managers do not have the scope to operate as they do in the best run businesses.

Of course, there are a number of substantial inhibitions which prevent a purely entrepreneurial or business style approach; for example, the accounting systems and the time cycle for financial judgments which have to match the requirements of public accountability and annual budgets, and in most areas the absence of a profit motive. However, in spite of these special factors, I believe that management can be given sufficient freedom and be able to achieve the best standards of the world of commerce.

Before I invite you to turn your minds to Whitehall I must briefly touch on the problems of scale. As in business, the Civil Service faces the problems of size, and the problems of size are far from being solved in any organization. Size, by its very nature, tends to conformity; to long-term plans and the commitment of resources (money and people) before the future can be clear; and to inflexibility so that when corrective action is needed, modest adjustments are not enough and major upheavals occur. Large organizations are often merely collections of units each with its own independent history and traditions of working

and these groups lose sight of the best interests of the large organization. Most large organizations have been grappling with these problems—particularly along the lines which modern management theory has developed. The exponents of methodology, and efficiency consultants, have rightly convinced them that features such as Corporate Planning, Profit Centres, Management by Objectives and a host of other slogans are essential to survival. Unfortunately, however, these tools of management have been too often elevated as the prime elements of success whilst they are no more than fundamental necessities in the same category as accommodation, light, heat and office equipment.

The real solution to the problem lies in the management of people, their motivation and their career development and the problem of dealing with the people for whom the organization exists—the customers—and those who depend on the organization for their survival—the suppliers.

What are then these problems of people? I will examine the internal ones first.

Leadership. In the past, the stick and carrot method of leadership was widely used, but it will not do today if we are to inspire people to give of their best. We live in an age where people are challenging the wisdom and ability of leadership as never before and leaders will only succeed if they can demonstrate their competence to lead.

Management, therefore, must not be selected from a narrowly based *élite*, nor can it be selected from people whose experience is limited or over-specialized. Management requires the skills and familiarity with a wide range of disciplines, and steps must be taken sufficiently early in the careers of those within an organization to develop those who have the ability to be 'stretched'. Subjects such as career planning, good training schemes and experience outside of the Civil Service must be given more priority. The movement of men to respond to short-term needs rather than on long-term career development must be the exception rather than the commonplace. The Civil Service must also ensure that the best of its intake with management potential are encouraged to follow careers which fit them for top management jobs. They will only be encouraged to do so if it can be clearly seen that the leader in management areas is considered as important in Whitehall as the good all-round administrator or policy maker. The rank and the pay and calibre of men in certain specialist categories must match the responsibility placed upon them and this means that categories such as Accountant, Engineer and Contracts Officer must be able to command overall respect and, most important of all, that these categories can see that there is room for them at the top.

Decision taking. Decision taking and—dare I say it—calculated risk taking are the essential characteristics of successful managers. It is not, of course, only in large government organizations that decision taking

is becoming more difficult and that the 'Organization Man' is often considered safer for senior jobs than the maverick who has originality, imagination and an individual contribution to make.

In a large departmental agency, management systems will normally have evolved to suit conditions dictated by the accountability of Ministers and their permanent officials. For the managers of an agency they will often be cumbersome, diffuse and inadequate, with decision levels and lines of communication which place the managers at a permanent disadvantage.

The incompatibility of systems required by the central authority with those of its departmental agency can have its greatest effect upon the management of human resources. Unless a manager is allowed to recruit to his organization the skills and experience which he needs, and unless he is party to any decisions to move or alter that mix of skills, it is quite unfair to judge him on overall management performance. The manager must be in a position to react quickly and authoritatively in areas such as industrial relations if management initiative is to be retained and good human relations preserved and improved.

Lastly under this heading of Decision Taking, it must be accepted that managers cannot wait for all problems to be overcome, nor for the validity of change to be exhaustively examined, nor the financial consequences to be fully costed before he takes the decision to go ahead. Of course, such a policy inevitably means mistakes will occur, but overall success must become the criteria for judgment and not the occasional failure.

Job satisfaction. A manager must have sufficient freedom of action and discretion to enable him to create an atmosphere amenable to job satisfaction and which enables him to demonstrate that he recognizes the importance of the individual. These objectives are not difficult to achieve in small organizations. However, in large ones linked to the exploitation of modern methods with the policy makers remote from the day-to-day work, human beings can easily feel that their role has been reduced so that they have become cogs in a soulless machine.

In such an environment of boredom and frustration, men rebel against their lot, either actively with apparent indifference to the health and well-being of their organizations or passively by contributing no more than is necessary.

Managers in government, as outside, have a responsibility to provide more than the weekly pay packet or salary. They must be given the resources to improve the quality of the environment of the human beings they employ. There are so many ways in which this can be achieved without much cost. People who stand on their feet most of the day should have ready access to chiropodists, women employees should have ready access to a hairdresser; family problems should receive humane consideration and the quality of the food and the surroundings in staff restaurants must be high. However, it is not the individual items

which are important. It is the concept that people have problems which are the affair of management and which cannot be discharged by pay. We must also develop personnel management which not only deals with the personnel needs of the business, but really cares about the people in the business. This needs people with special aptitudes to whom employees can turn to raise matters other than pay and promotion. There is nothing paternal in any of these features when they ensure that people are relieved during working hours of distracting problems, where they reduce absenteeism and, most important of all, where they reduce staff turnover. The latter may not yet be a major problem in the Civil Service, but without being dubbed a Jeremiah I am suggesting that it could well become one and considerably reduce the efficiency.

Bureaucracy. In all large organizations, and I suspect more easily in Whitehall, bureaucracy can grow and stifle initiative and distract from efficiency unless positive steps are taken to counter it. Paper can become more important than people, and rules can too easily develop that will inhibit the individual from contributing of his best. In fact, the whole weight of men and machinery will cause people to resort to paper, writing to one another instead of talking, dealing with the in-tray instead of with people, with rule books written to prohibit common sense, humanity and sensible discretion. At first sight these points may appear trivial, but they will effectively inhibit success, and top management must continually mount a war on paper, rules and regulations and let it be known that these methods will be welcome only when they are clearly sensible to maintain sensible commonality and to discharge public responsibility. Excessive monitoring and checking must be eliminated and it must become the rule that such activities will be judged as examples of bad management particularly when, as I have seen, nine people waste six weeks to approve a single simple decision.

Groupings. Logic will argue that massive groupings and centralization are the most efficient ways of dealing with large blocks of work. However, large groups (and, in my view, these are more than 1,000 people) become so impersonal that people lose their sense of identity and the feeling that their personal contribution is worth while. Large organizations should be structured so that members of each group can know their colleagues and have the opportunity to know the management. In turn top managers must reserve sufficient time to visit those they manage.

External relations. Now I turn to the external relations, which, for convenience, I will put into two main categories—*Suppliers* and *Customers.*

In respect of suppliers, popular pressures have long advocated the sanctity of the lowest competitive tender and, even now there is more enlightenment, tradition dies hard. Insufficient emphasis is given to the value of quality, reliability, honouring of delivery dates and what may

loosely be described as service; and the opportunist or the second-rate can too easily become a government supplier. Inadequate account has been taken of the enormous changes that have taken place in the industrial base of the nation where there are now monopoly and near-monopoly positions in many areas of substantial expenditure. Events have too often forced a change in purchasing policies when, instead, the freedom and encouragement to take an intelligent forward view would have led to greater efficiency and better value for money. Unless managers in Whitehall are allowed to pursue intelligent policies which enable them to create partnerships with industry by restricting the number of suppliers to those needed to maintain competition and by rejecting those of proven inefficiency and unreliability, they will fail in a major sector of their direct responsibility. They will also fail government in so far as they will not be in a position to use the skills and purchasing power which they possess to build up the strength of important segments of the nation's industrial base, and their actions can, in fact, work to the contrary and actually destroy part of the nation's wealth.

All trading-type activities exist to satisfy customers, for without customers they have no reason to survive. I hope this statement will not lead you to dismiss my observations as those of a retailer, because they are valid in so many of the organizations—Defence Procurement, Royal Ordnance Factories, Supply Divisions, and so on. Customer complaints and customer interests must not be delegated by top management to the point of abdication to some junior employee. Top management must demonstrate their involvement with the customer, because unless they do so, those down the line will abdicate from their responsibilities to achieve customer satisfaction, and in all too short a time there will develop an attitude of arrogance that the organization knows best.

These then are the main points in which managers in Whitehall must be given the room to manoeuvre. The ability to succeed in these areas must be the criteria by which managers are judged. However, I feel it would not be inappropriate here also to dwell on the particular problems of management in government as compared with large organizations in business, for there are undoubtedly additional problems and challenges which cannot be conveniently set aside.

- No one is interested in the successes of civil servants, only mistakes are discussed in public. Thus, civil servants will tend to take a safe line examining all options and attempting to solve all problems before proposing action. To overcome the difficulty, those operating any management must take positive steps to seek out good work and congratulate whoever is concerned.
- Control of numbers is centralized and applied across Whitehall. Numbers are very much in the minds of politicians, and even become the subject of election pledges. Moreover, in spite of the best endeavours

by government, the pressures on the Civil Service tend to increase the workload without removing past responsibilities. Within these overall ceilings are included activities which are productive by any standards of judgment, such as defence sales and the Royal Ordnance Factories, and where success in such areas will inevitably mean more staff. Whilst I would agree that there is scope long term for a substantial reduction in numbers needed to carry out existing tasks, such savings can only be achieved by eliminating, simplifying or rationalizing areas of work. To identify these areas and to move away from past practices takes time and extra effort. Managers must press and succeed in their case for this extra effort if they are to achieve the long-term savings.

- Public purchasing policies have to take into account regional preferences, unemployment, 'buy British' and collaboration with Europe; and business would say that it is impossible to operate successfully with economic use of staff in such an environment. In government, managers have to learn how to strike a balance between the competing pressures and still create an environment conducive to good purchasing practice.
- Government cannot relinquish involvement because problems are too difficult or unprofitable in the use of resources. Its activities range over a far wider field than any sane business organization would undertake. Continuous and substantial effort therefore has to be devoted to keep under review the multiplicity of activities and ensure that they are not becoming unnecessarily complicated.
- Government constantly has thrust upon it an enormous number of large and complex tasks. Ruthless selection of priorities is therefore essential and, whatever the pressures, the list of tasks requiring attention must be restricted to the ability of the resources available to deal with them. If pressures to add to the list are irresistible, an existing priority must be set aside. Difficult though this may be, unless there is firmness the effort available will be so dissipated that no task will be carried out satisfactorily.

One final point—the essence of my message. Management is for people with experience, wisdom, judgment and ideas; it is not for the narrowly based specialist who has been deprived of wider experience.

As with all other human activities, success and worth-while changes spring from ideas and vision and not from obedient observance of precedent and custom. Successful managers are not Philistines nor are management areas places into which to shunt Philistines. Successful managers are vitally concerned with the quality of life and the motivation of human beings. Although in the commercial world a quick fortune may be made by the narrow pursuit of short-term objectives, in large businesses and in Whitehall successful leadership will only spring from rounded human beings possessing the experience to make mature judgments and who are allowed to act upon their judgment and to act swiftly.

Developments in the Organization of Government Departments

T. H. CAULCOTT, Civil Service Department

The article which follows draws on material prepared for a recent conference on comparative techniques of government. The conference, which was held in Canada, was attended by officials from a number of Commonwealth countries.

Introduction

This article concentrates on areas where there have been changes in the machinery of government over recent years; and it attempts to describe both the manner in which the functions and responsibilities of the Executive are divided between different administrative units and the issues which this division poses in terms of the allocation of resources and the resolution of conflicts between those units.

The organization of the Executive in the United Kingdom

The Executive in the United Kingdom is organized on a functional basis. This distributes the responsibilities of the central Government between Departments in a number of groups, which are as homogeneous as possible and provide the Ministers concerned with a set of interrelated functions for which they can reasonably be expected, subject to the collective endorsement of the Cabinet, to be accountable to Parliament.

The development of large Departments

The application of this principle has led to an aggregation of functions which were previously exercised in separate Departments into a smaller number of large Departments. This process, which has been continuous since the Second World War, is illustrated by the chart at the centre pages. Thus, several Departments which were originally responsible for various different aspects of social security were first grouped together in a Ministry of Social Security; and that, in turn, has now been combined with the Department responsible for policy on the health services in a single Department of Health and Social Security under one Minister, the Secretary of State for Social Services. Similarly, in the environmental field the individual Departments which were responsible at an earlier stage for dealing with housing, local government, transport and public buildings have been grouped together in a single Department of the Environment under one Minister, the Secretary of State for the Environment.

One advantage of this process of unification is that virtually all Departments now have at their head a Minister who has a strong claim to be a member of the Cabinet; and at the same time it has been possible to reduce the size of the Cabinet to the more compact and manageable figure of 19.

A second advantage is the greater scope which this grouping of functions gives for the resolution within a single Department of the differences which used to arise between different Departments. For example, the interests dealing with road transport on the one hand and with land use planning on the other are now comprised within the unified Department of the Environment, whose Minister is accordingly able to take a synoptic view of the issues which arise and to resolve differences between the component parts of his Department by reference to more comprehensive criteria than any one of them can command.

On the other hand the creation and development of these very large Departments have brought fresh problems. In part these lie in the internal management of organizations which are so large. This is not just a question of numbers but more particularly of complexity of issues. Thus, the numbers of staff at senior management levels can necessarily become very high; and this makes it more difficult for a single Minister to find time to deal with the range of issues with which he will be faced. For example, the responsibilities of the Department of Trade and Industry encompass control of most of the public sector nationalized industries, the relations with private sector industry, the promotion of exports and other issues such as civil aviation and marine services. The Secretary of State in charge of the Department is supported by other Ministers, to whom he devolves the supervision of particular sub-groups of functions. But the ultimate responsibility remains his; and the larger the Department and the wider the range of its functions, the heavier is the burden of that responsibility.

Second, there is the problem of the relations of these very large Departments with each other. This problem of 'manageability' arises at the very outset—at the stage of defining the frontiers of the new Departments. For example, it is arguable that Education is a social service, which should be brigaded with the other social services in a still larger Department of Health and Social Security. And the same could be said to be true of Housing also. But there must clearly be limits to the size of the political and administrative burden which any one Minister can reasonably be expected to carry: and the concept of functional integration has to be tempered in practice by considerations of realism in terms of day-to-day working. The problem remains—how to draw the dividing line between Departments in such a way as to do the minimum damage to their essential interrelation. The same difficulty arises when it comes to devising the most appropriate organization for giving effect to the concept of regional policy. Is this primarily a question of planning land use, communications, etc., and therefore to

be assigned to the Department of the Environment? Or is it a matter of the distribution pattern of industry and employment and therefore a function appropriate to the Department of Trade and Industry? The answer, of course, is that it is not exclusively either but essentially both; and some means must be found of enabling the very large Departments to resist the temptation—to which they are inevitably prone because they now combine so many functions inside a single frontier of responsibility—to try to retain within their own jurisdiction and to decide on their own responsibility issues which arguably require inter-departmental discussion if they are to be objectively examined and the concept of collective ministerial responsibility is to remain meaningful. In short the creation of very large Departments has not reduced the need for machinery of co-ordination at the centre of government. It can be argued to have increased it: and this is nowhere more true than in the area of allocation of resources and assessment of priorities, i.e. in the area of relationship between the very large Departments and such central Departments as the Treasury, whose task of demand management and resource allocation can become even more difficult when it is faced with the large and monolithic blocks of demand represented by the claims of the new very large Departments.

The central Departments

During the period of the growth of the very large Departments, other forces have influenced the development of the machinery of government at the centre. Traditionally, the Treasury was responsible not only for the functions of a Ministry of Finance in relation to money supply, the balance of payments and so forth, but also for the control of government expenditure and for the organization and personnel management of other Departments. A separate Cabinet Office provided a secretariat for the Cabinet itself and its committees, and was responsible for organizing the flow of Government business requiring collective discussion by both Ministers and officials. In recent years this pattern has progressively changed; and there are now three separate organizations at the centre. The Treasury still deals with financial policy and with the major issues of resource allocation and the control of expenditure. But the management of the government service, including questions of departmental structure and organization, is now the responsibility of a separate Department, the Civil Service Department, reporting to the Prime Minister. Finally, while the Cabinet Office retains its role of providing both an impartial service for the Cabinet itself and for its committees, and a machinery for the resolution of inter-departmental disputes, its functions have been enlarged by the addition of a new body called the Central Policy Review Staff (CPRS). This body, as its name implies, is responsible for helping Ministers to distinguish the wood from the trees by keeping their main policy objectives firmly in view and reminding them, as appropriate, of the need to relate separate collective decisions to the totality of those

objectives. Its primary task, therefore, is strategic and long term rather than tactical and immediate; and, whether it is engaged in conducting one of its periodic reviews of the Government's broad strategy or in providing a collective brief for Ministers on some specific problem of particular difficulty or importance, it is concerned essentially to preserve the thrust, direction and consistency of the Government's policies as a whole. As such, it is not the monopoly of any single Minister: it is at the service of all Ministers impartially and its programme of work is approved by the Cabinet as a matter of collective judgment. This attempt to provide a conceptual framework and a synoptic context for the innumerable separate decisions which the Government have to take is an administrative innovation which, like all innovations, has to proceed by trial and error. But the need for some such instrument of administration is clear.

One of the main reasons for the division of the Treasury and the creation of the Civil Service Department lay in the major reforms which followed the recommendations of the Fulton Committee. But the present allocation of functions between the three central Departments still leaves open a number of questions on the best form of relationship between the centre and the individual Departments. In particular, while the need for firm co-ordination becomes ever greater as the complexity of modern government increases, the success of an individual Department's policies and the political standing of its Minister can depend very largely on the share of resources which is expended in its area of responsibility. But the judgment on this issue, which is in itself one of the most difficult which a Government has to take, is complicated still further by the growing realization that it can no longer be based on the merely quantitative considerations of macro-economic budgeting, but must also be responsive to the qualitative susceptibilities of a sophisticated electorate which is increasingly concerned to improve the real standard of living in terms of education, health, leisure, the environment and so forth. This requires a modern Government to attempt the task of comparing incommensurables, of weighing chalk against cheese; and although such choices must in the last resort be matters of political judgment, it is the duty of the administrative apparatus, and particularly of such elements as the CPRS, to give them all the help it can. This new and growing requirement, in so far as it necessarily encourages the use of such techniques as cost-benefit analysis, manpower budgeting, etc., is itself one of the most powerful forces for innovation in modern administration.

Accountability and the efficient operation of Government Departments

For the reasons suggested earlier the creation of very large Departments has highlighted the issue of ministerial accountability. Under our Constitution ultimate responsibility rests with the Minister in charge of each Department. He is accountable both in the sense of being respon-

sible for the broad allocation of resources within his Department and, in a more general sense, for its policies and its operational efficiency. But the detailed personal accountability which is possible when government is on a small scale and both the expenditure and the numbers of staff involved are limited, is no longer realistic in the light of the scale and complexity of modern government. As part of the process of attempting to make the government machine more manageable the Government have adopted a policy of trying to separate purely executive blocks of work and to delegate them to separate accountable units of management.

This delegation has taken two forms. One, sometimes called 'hiving off', involves transferring the work in question to bodies outside Departments altogether. The tests to be applied here are whether the work is of a sufficiently commercial character to enable the organization to be regarded as wholly or largely financially self-supporting and its efficiency to be measured by the price mechanism or some other form of performance test. In addition, its responsibilities should involve little or no policy-making functions and little or no discretionary authority of a kind which might affect the liberty or rights of the citizen. If these tests are satisfied, there should be little need for ministerial accountability. Large parts of the public sector come within this definition and, indeed, have never been part of the central Government. Examples are the nationalized industries which comprise all the major public utilities. But even these, although not subject to day-to-day ministerial control or accountability, are subject to ultimate ministerial control because their operations are so significant for the management of the economy as a whole.

For a majority of functions now exercised by the central Government, however, the criteria suggested above for 'hiving off' from Departments are not met. Nevertheless, there are certain executive blocks of work where the degree of ministerial accountability can be reduced in so far as issues of policy are rarely involved and there is little need for day-to-day ministerial supervision. In such cases the Government's policy is to devolve management as far as possible to the officials in charge of the organization, but also to require them, subject to broad ministerial direction, to answer for the operations of the particular units involved. Examples are the agencies dealing with the provision of advice about employment opportunities to those seeking work and about credit facilities and guarantees for exporters. But the development of such 'departmental agencies' still leaves unanswered a number of obvious questions about the border line between the accountability of the Minister and that of the officials who are responsible to him for operating the agencies; and it would be premature as yet to try to pronounce finally on this particular attempt to relieve the burden of personal ministerial accountability. And further developments are to be

expected, an example being the Government's recent proposals for a Manpower Services Commission.

The Government and the citizen

The more the Government tries to simplify its task by simultaneously amalgamating functions and delegating accountability, the more the average citizen is liable to feel that administration is becoming 'de-personalized' to an extent which diminishes his 'participation' in the process by which he is governed and may even threaten his identity as a free and equal member of a democratic society. Traditionally there have been two safeguards for the citizen in his relationship with government. One has been through the operation of the law and the redress of grievance through the courts. It is not necessary to elaborate on this aspect of the matter. The other form of remedy has been via the Legislature, particularly the individual Members of Parliament. In recent years, however, the means of complaint and enquiry which are available to MPs have come—rightly or wrongly—to be thought to constitute an insufficient check on the Executive in the light of the growing complexity of government and the increase in the number of points at which the Executive exerts an impact on the daily life of the citizen. It is for this reason that Parliament has introduced the system of the Parliamentary Commissioner for Administration, or Ombudsman, an official responsible directly to Parliament for reporting on the operations of the Executive in individual cases where there is any charge of mal-administration. This innovation is still in its very early days in the United Kingdom; and the question whether it can help to redress the sense of grievance often expressed by a public faced with the complexities and sometimes impersonal approach of the government machine is not yet fully resolved.

At the same time it is clear that it does not suffice to wait for the citizen to complain: the Government itself must take the initiative in explaining its policies to the general public, in clarifying the complexities of the administrative process and in making statutory rights and duties as simple and comprehensible as possible. The potentialities of the publicity media are being progressively developed for this purpose; and the whole question of 'communication' between the Government and the governed is receiving increasing attention. But 'open Government' creates obvious problems in relation to both the Legislature and the general public; and these, too, have not yet found a wholly satisfactory solution. The debate continues.

Management Audit in Defence

A. D. SCOTT, Ministry of Defence

Mr. A. D. Scott, TD, FCA, ACIS, is Director General of the recently formed Directorate General of Internal Audit in Ministry of Defence.—*Editor.*

Introduction

The term 'internal audit' is not one which has traditionally fired the imagination or conveyed thoughts of a stimulating environment in which to work, largely because in the past it has been associated with routine and often tedious checking or vouching activities. For many years the conventional approach to audit in both the private and public sectors has been to look methodically at each financial aspect of a company or organization, and check, test check, vouch or scrutinize documents or book entries to ensure the propriety and accuracy of transactions. Although regard has often been given to the effectiveness of internal control, the audit has been essentially directed towards checking individual transactions. This sort of approach may have been, and indeed may still be, appropriate in very small organizations employing manual or at best partially mechanized systems where the numbers of staff employed make effective internal control difficult. However, with the advent of larger organizations often employing ADP systems and large numbers of staff there is usually scope for applying a more effective and more up-to-date approach which may be described as the systems audit.

The systems audit approach

The systems or procedural audit, although already practised by many large firms of professional accountants in carrying out the audit of industrial and commercial organizations, is still in the development stage and far from being universally accepted and applied in practice. Consequently the adoption and gradual implementation of this relatively new approach by the Ministry of Defence is not so much a question of catching up with the private sector, but more of taking its place with the leaders. Similar progress is being made in other Government Departments and this new approach is reflected in the recently published Civil Service Department booklet *Internal Audit in the Civil Service** which has been compiled in consultation with the Treasury and Exchequer and Audit Department. It sets out the current CSD views

* *Internal Audit in the Civil Service*, published by Her Majesty's Stationery Office, price 57p.

regarding the role and approach of internal audit in the Civil Service. In particular it describes the contribution to management which can be made by internal audit and outlines the approach to a systems audit. This approach, which is currently being implemented in the Ministry of Defence, may be summarized as follows:

(*a*) Ascertain and record the system of internal control.
(*b*) Assess or appraise the system of internal control.
(*c*) Test the system of control.
(*d*) Highlight weaknesses or shortcomings in the system.
(*e*) Report to management on the effectiveness of the control system.

This approach relies on the premise that an effective and efficient management system with adequate internal controls will eliminate most if not all major causes of error or fraud and that as a consequence little will be gained by audit checking in detail a large number of individual transactions if it can be proved that there is a sound system of managerial control over those transactions, which is working properly. Audit is directed towards confirming the soundness or otherwise of the system. There are several ways in which a system of internal control can be recorded and ultimately appraised, and these include the use of notes, internal control questionnaires (ICQs) and flow charts. Notes are suitable for describing procedures which are not complex, but in an organization like the Ministry of Defence few systems will be simple enough to be comprehensively recorded in this way and it will normally be necessary to use an ICQ supported by flow charts and notes. An ICQ is basically a check list of questions designed to establish the system of internal control in force and to highlight any weaknesses.

Having ascertained and recorded the system of internal control it is necessary from an appraisal of it to identify those types of transaction which require strong controls, for example, high value or otherwise sensitive items, as well as to identify areas of weakness. Any apparent weaknesses in the system should be considered for testing in depth and possibly reported to management with a view to remedial action being taken. A further objective of the appraisal is to determine what programme of procedural audit tests should be carried out to ensure that the controls are operating properly.

The objects of the procedural tests are to confirm that the system as recorded in the ICQs and flow charts is operating in practice, to reveal any changes since the last examination, to ensure that the established procedures and inbuilt controls are operating effectively and to expose any deviations from them or weaknesses in their operation. In short the object is to confirm that the theoretical system is being applied effectively in practice. The final stages in the process involve consideration and assessment of any breakdowns or weaknesses in or deviations from the system of internal control and, most important of all, the reporting of these to management. It will not always be possible to provide a complete solution to weaknesses or deficiencies disclosed

without further investigation and whilst on occasions the auditor may become involved in such investigations it may be more appropriate to recommend that a management services branch be invited to carry out the work.

From the foregoing some readers may form the opinion that a systems audit is somewhat superficial and cannot hope to disclose individual errors or even an isolated fraud. However, the acid test is whether the detailed checking of a sample of, perhaps, 5 or 10 per cent of transactions is more effective than a thorough study and appraisal of the overall system and its inbuilt controls coupled with adequate procedural tests. Neither method will as a matter of course disclose every isolated minor error or fraud, but the systems approach will go a long way towards assisting management in devising and maintaining sound systems in which it will be difficult, if not impossible, for recurring errors or fraud to remain undetected for long, or for these to have a significant financial effect.

The formation of DGIA

The Ministry of Defence took the first steps towards the introduction of this new audit approach with the formation on 1st June, 1972, of the Directorate General of Internal Audit which has three main objectives:

(*a*) To reorganize internal audit in the Ministry of Defence and the three Armed Services onto a centralized basis.
(*b*) To assist management by providing an effective audit service using modern auditing techniques.
(*c*) To introduce a management or efficiency audit service.

Before going on to describe how these objectives are being met it may be useful to outline and put into perspective the size and scope of Ministry of Defence activities. The net annual defence budget in 1973–74 is £3,365 million which represents approximately 5¾ per cent of the Gross National Product; or to put it in commercial terms the nation spends on defence more than twice the annual turnover of the ICI group on a world-wide basis. The numbers of personnel employed at 1st April, 1973, were just short of 700,000, made up of 367,000 Service personnel and 325,000 civilians. This is a very large organization by any standards and it is not surprising, therefore, that management methods are generally highly sophisticated with the employment of many large computer configurations which almost certainly match any to be found in the private sector. For example, the Royal Army Pay Corps Computer Centre (twin IBM 360/50s) processes the pay accounts of some 180,000 soldiers, whilst the Royal Air Force is about to introduce a real time system (twin ICL 4/72s) exercising stock control over RAF stores on a world-wide basis.

The activities and scope of the Ministry embrace all the usual policy, finance and administrative functions of a large Government Department together with the added responsibility for the Procurement

Executive and the three Armed Services, including the Royal Ordnance Factories and HM Dockyards. The Procurement Executive is responsible for all defence research, development and procurement activities; it also has a responsibility in support of government-sponsored civil aircraft and aerospace projects. The three Armed Services, in support of their primary defence and peacekeeping role, each have a substantial logistical backing which includes storeholding and distribution organizations for all types of equipment, stores, armaments, ammunition, clothing, food, and petroleum products. Further logistical support exists in the form of workshops, dockyards, etc., as well as computerized pay systems in each of the Services. There are also separate computerized systems to cater for civilian pay, both industrial and non-industrial.

The scope of the Directorate General of Internal Audit embraces the audit of relevant activities of all departments of the Ministry of Defence headquarters including the Procurement Executive and for all establishments and units of the three Armed Services including the Royal Ordnance Factories. The organization through which this responsibility is exercised in the United Kingdom is outlined below. It is envisaged that a similar organization will be developed for the audit of Defence installations, Service establishments, and units abroad, but this is still under consideration.

Internal audit has, of course, played an important and useful role within the Ministry of Defence and the former Service departments for many years. However, until recently it has been a rather fragmented organization and has not had the advantages which can be derived from an integrated audit directorate, which is independent of line management, and able to audit systems which often span several quite separate areas of management responsibility. The new audit organization in the UK will have about 300 auditors comprised mainly of Administration Group staff, but including up to 40 professional accountants. They will be based on three regional audit centres at Stockport, Worcester, and in the Reading area with responsibility for the audit of all establishments and units in the north of England (including Scotland and Northern Ireland), the west of England, and the south-east respectively. These numbers include the staff of a small headquarters organization based in central London and a fourth audit centre also based in London which has responsibility for the audit of various MOD headquarters and Procurement Executive activities. The regional audit centres are due to be staffed and opened, on a phased basis, during 1973, but it will take at least two years to train and fully develop staff to cover the wide range of audit duties which will fall within the scope of each audit centre. Previously, audit staff numbering around 420 based on some 30 locations throughout the United Kingdom have been organized on a functional basis so that one team would, for example, look only at payrolls and others only at stores. They have not been able to benefit from a wider and more balanced range of audit

tasks, or to see the specific area on which they were engaged in the overall context of MOD operations.

A key feature of the new audit organization is the dual responsibility of each regional audit director in the UK, for on the one hand determining audit policy and directing an area of functional audit (e.g. all pay systems) throughout the Ministry, and on the other for the day-to-day management and control of all audit in his region. This dual role enables most audit work to be carried out on a regional basis, thus minimizing travel by auditors and providing a better service to the customer, whilst at the same time ensuring a standard and co-ordinated approach to those systems, notably computerized systems, which span more than one region and extend in some cases to Overseas Commands.

Another important feature of the organization is that it will be entirely independent of management, and the Director General will respond to the Permanent Secretary (PUS) through a Deputy Secretary. It should be stressed, however, that it does not follow that audit reports and recommendations will be addressed to PUS: indeed such a step would be a rare occurrence. Normally, audit observations and recommendations will be raised and discussed with the appropriate line management with a view to reaching mutual agreement on the action, if any, to be taken.

Following the adoption and progressive implementation of more modern audit techniques, MOD auditors will gradually become much more management orientated. The management or efficiency audit is in many ways a logical and rewarding extension of the systems audit approach. Auditors employing this approach will be quickly able to pinpoint areas in which managerial, administrative, or clerical procedures are not as efficient or cost-effective as they might be. Excessive checking operations, duplicated effort, obsolescent procedures and regulations as well as weaknesses in management systems and organization will be among the first to be revealed by management audit scrutiny. The objective is not to catch management out, but to assist and advise particularly in respect of those areas where greater cost effectiveness and financial savings can be achieved.

In order to implement this programme of change auditors must not only be generally better trained and developed over a wider range of duties, but also be prepared to spend significantly longer tours of duty on internal audit work. Training is the primary requirement and the first courses introducing the systems audit approach to existing audit staff have already been held. Further more specialized audit training will also be given to staff, as will 'on the job' training and development; 'on the job' or practical training will be implemented with the support of a number of newly recruited professional accountants who already have experience of modern auditing techniques.

Training in ADP is another essential requirement as there are few management areas which are not computerized to a fairly high degree.

All audit staff will be given the opportunity to acquire a background or working knowledge of ADP systems and methods with particular reference to the more specialized audit techniques to be applied. In addition those staff directly concerned with new ADP projects or with audit at computer centres will be trained and developed to the point of being 'expert' ADP auditors; this does not necessarily mean, however, that they need to be trained systems analysts or programmers.

The modern auditor must increasingly be concerned with much more than examining and appraising in isolation a computerized payroll system or a large inventory of military stores and equipment. He must be able to tackle the audit of a whole range of financially orientated functions ranging from simple accountancy, payrolls, bill paying, store-holdings, and costings to financial and management accounts including the audit of Defence accounts and estimates. The need for staff to undertake such a wide range of audit tasks exists in many areas of the Ministry and this need will be reinforced when the Royal Ordnance Factories and HM Dockyards adopt a trading fund basis of operation. Whilst some staff, including qualified accountants, are already in post and carrying out an efficient audit of such areas, the demand outweighs supply and every encouragement is being given to staff to undergo accountancy training which in many cases may lead to the acquisition of accountancy qualifications.

Although present Defence audit staff tend to spend only a few years in an audit post the aim is to build up a much more highly trained body of auditors who will tend to spend significantly longer periods in an audit post. Indeed, it is hoped that those staff who have a special interest in auditing and accountancy will wish to make full use of their specialized knowledge and experience by making a career either in auditing or in a combination of auditing, accounting, and possibly ADP.

To sum up, the 'quiet revolution' referred to in a previous auditing article in the *O & M Bulletin* (November 1971 edition) is now starting to take effect in the Ministry of Defence. However, the transition from a conventional audit approach to one which seeks not only to provide the same sort of safeguards as before, albeit using different methods, but also to take an active part in assisting management to make financial savings is likely to be a lengthy one. It is as much a change in philosophy as it is a change in methods and if management is willing to seek out and implement ways of becoming more cost effective, as I believe it is despite the absence of a profit motive, then the management auditor has an important part to play.

Prison Management Review —The Third Stage

J. HAY, Home Office

Penal establishments controlled by the Prison Department are many and various. They may loosely be categorized as remand centres, detention centres, borstal institutions, young prisoner centres, local prisons, open training prisons and closed training prisons, but there are many variations within each category and also combinations and complexes. The populations of individual establishments range from fewer than 100 to nearly 2,000 and their locations from truly rural to city centre. The buildings include converted country mansions, ex-Service barracks and camps, old citadels, ex-Victorian Houses of Correction and County Gaols and a distressingly small proportion of modern purpose-built establishments. Many, particularly the local prisons, are overcrowded and of these very few are really suitable for expansion, yet pressure on accommodation is such that existing places cannot be abandoned or comprehensively redeveloped in the short term. The management problems posed by this heterogeneous collection were and still are enormous and reorganization to meet them has been tackled in three stages. The first and second stages were devoted to the reorganization of Prison Department headquarters and the setting up of a regional organization: they were described in the August 1970 edition of the *O & M Bulletin*. The present article describes the third stage, that devoted to management at institutional level, which is still proceeding.

Early in 1971 the Home Office decided to set up a review team with the following terms of reference:

> "To recommend organizational structures and management methods appropriate to the needs of different prison service establishments or groups of establishments and to make proposals concerning the staff roles and functions and the categories of staff which need to be employed in each institution."

Under the direction of the Assistant Secretary in charge of Management Services, the O and M team includes 'lay' O and M staff, all of whom have had previous prison experience in various capacities, together with a governor, a principal psychologist, a prison administration officer and a prison chief officer. An outside view is provided part-time by senior management services contacts in CSD and DHSS. The review is subject to the overall direction of a Steering Committee, chaired by the Controller of Operations, Prison Department. Among other things the Steering Committee gives guidance as to the assumptions concerning the present or prospective purpose of establishments

and the nature of their regimes, etc., which must be adopted for the progress of the review.

Two other contributions were organized, the introduction by a separate team of Management by Objectives into a borstal and the collation of information on the organization of foreign prisons, and of relevant bibliographies. These exercises were commissioned as valuable in their own rights, but their findings will also be fed into the main review. The MbO exercise is described later, but part of the reason for launching it was to enable the problems identified and the solutions suggested from the use of MbO and orthodox O and M techniques to be compared.

Owing to pressure of other commitments, the assembly of the review team took some time and it did not meet as a complete working group until late in 1971. In the meantime some preparatory work had been done. Visits were paid to headquarters divisions and to a regional office to discuss their views of the problems in the field and a series of talks was given to meetings of field management staff at different levels and in different parts of the country, explaining the purpose of the review and inviting constructive contributions. It was important that field staff, already under severe operational and administrative pressures, and only too conscious of shortfalls from the ideal, should not regard the review as either a witch-hunting or a head-hunting exercise. The Steering Committee decided that the initial field examinations should take place in the Midland Region and selected eight establishments: two local prisons, two closed and two open training prisons, and two borstals which provided a range of sizes and types of regime. It was also decided that a review of this nature would not be complete without an appreciation of the viewpoints of the inmates themselves and the team was instructed to consider ways and means of obtaining these. In all, the selected establishments comprised some 1,550 staff, including operative grades, looking after some 4,200 inmates of all types, ages and lengths of sentence.

The first problem confronting the team was how to organize their investigations. A penal establishment is a very complex organism; as far as the basic machinery for living is concerned it is virtually a society in miniature, albeit incomplete in several important aspects. It needs to meet to a greater or lesser degree most of the interlocking requirements of organized society—the major organizational difference being that whereas in a free society requirements are frequently met by discrete agencies operating largely independently and often on a customer/supplier basis, a penal regime needs consciously to organize these activities as a corporate and if possible therapeutic whole operating within a limited allocation of resources and a limited number and range of staff. Almost by definition most staff have managerial functions of some kind since the inmates provide the bulk of the operative level and the interaction of staff roles is reflected by complex and sometimes subtle organizational relationships. It would take an investigating

officer a very long time to follow all the ramifications of the working loops by the time-honoured method of following his nose; and the tolerance of the establishment would soon be strained. Like most operational organizations, individual penal establishments prefer field investigations to be intensive rather than protracted and expect investigating officers to have done their homework and to know what they are looking for. There was also the problem of ensuring that data collected by a number of investigators was mutually comprehensible and in a form suitable for overall analysis.

It was decided to pool and capitalize on the considerable fund of knowledge of prison administration and operations already existing within the team and to design the enquiry so as to ensure that interviews of comparable job-holders by different members of the team would follow the same predetermined and logical sequence and enable data to be recorded in a common format. The plan prepared was to interview staff by reference to:

(*a*) An organizational *pro forma* and check list designed to test the job-holder's appreciation of his line and functional relationships, his main responsibilities, his method of evaluating performance, his personal duties and loading, his degree of delegation, the methods by which he communicated with other people, his own and the institutional aims and objectives, and his problem areas.

(*b*) A number of separate check lists which between them covered every activity in a penal establishment known to the team. The main headings comprised in all about 200 points for discussion and it was planned to question each job-holder on his contribution to each in terms of planning, management and actual implementation.

A short summary of the answers was to be recorded by the interviewer and the degree of involvement in each area by the job-holder was to be assessed on a four-point scale under each of the operative headings. Before going out in the field the team spent some time practising these interviews, with each member role-playing interviewer and job-holder before the rest of the group. This served the dual purpose of testing the formats and improving the consistency and quality of both the questioning and the assessments to be applied to the data. It also hoped to forecast the amount of time required to interview and write up each main category of job-holder. Naturally these times varied considerably according to the spread of involvement of the posts, ranging from two or three hours for the more restricted jobs to over ten for those encompassing a wide field of activities.

The team then considered the problem of how to obtain inmates' opinions without causing concern to the staff and arousing unrealistic expectations on the part of the inmate. It was decided that although the time and resources available to the team did not permit the lengthy and detailed observations which would be desirable for a scientific assessment of the effect of various institutional routines upon inmates, or the

use of controlled sampling techniques such as would normally be used for a professional opinion survey, much useful information could still be gained by direct observation of routines and direct interview of inmates using the subjective judgment of experienced independent investigators. To avoid misunderstandings on both sides it was thought better not to interview both staff and inmates on the same visit to an establishment, but the programme of the first series of visits was planned so that in addition to interviewing staff, members of the team would make at least two independent observations at each establishment of about 20 main routines which involve staff/inmate interaction and would attempt to see these routines through an inmate's eyes. These observations would also help the team to relate the information obtained from staff interviews to practical performance of tasks. A later series of visits was arranged expressly for the purpose of interviewing inmates directly. These interviews were planned on a much lower key because it was felt that:

(*a*) Inmates would have a lower tolerance than staff to structured and lengthy interviews.

(*b*) Detailed probing would be counterproductive to the main purpose of the exercise, which was to allow inmates freely to express their own subjective reactions to their experiences in custody.

Accordingly the team chose 24 broad topics covering the main things which happen to inmates whilst in custody and planned to invite each inmate to be interviewed to express his opinions on four of these topics only, plus an open-ended final question to allow him an opportunity to cover other subjects if he wished to do so. The topics were to be rotated to obtain an even cover over the inmate sample and the purpose of the rotation was to be explained to the inmates.

In all the team spent some 130 man-weeks gathering data in the field and as far as possible this data was analysed, summarized and charted between visits while it was still fresh in mind. In this time the team interviewed 300 staff and 240 inmates and made about 300 observations of routines. The staff were most helpful and constructive and the inmates contributed no less than 2,934 comments, most of which were assessed as sincerely felt and rationally expressed if not necessarily factually accurate.

The results of this massive fact-finding exercise confirmed the view that much needed to be done to clarify the tasks and priorities of penal establishments and to improve the organizational structures and management methods used to carry out penal tasks in the modern world. Many of the problems of the service had arisen from tasks and resources which had merely been tacked on to the simpler patterns of the past until the point had now been reached when the structure could stand no more. It was concluded that it was no longer appropriate to think in terms of solving problems by mere patching-up. After considering the evidence the Steering Committee endorsed the team's

view that what was now required was a development approach which would rethink the whole organization from first principles. This approach was defined as:

Stage 1. The restatement of the overall aims and objectives of the Prison Department.
Stage 2. The development of this statement into more specific local operational requirements.
Stage 3. A detailed translation of these requirements into actual tasks to be carried out in institutions within known constraints.
Stage 4. The allocation of responsibilities for implementing specific components of these tasks.
Stage 5. The design or modification of systems to enable these responsibilities to be carried out effectively.
Stage 6. The design of feedback and monitoring arrangements to ensure that the inevitable subsequent process of drift does not proceed unchecked.

The overall statement of the aims and objectives of the Prison Department was provided by the Steering Committee and the team is now working on the drafts of Stages 2 and 3. The method being used is to take separately each objective listed in the overall aims and objectives statement and to prepare a statement of the broad requirements that meeting the objectives would impose on institutions. A schematic is then prepared in block diagram form to show the logical steps necessary to achieve the requirements, and finally the task specifications for each step of the diagram are written. The data already collected on work performance in the field has been of great assistance in preparing these statements. A number of criteria are applied to the drafting process:

(*a*) That the operational requirements as expressed should flow naturally from the national objectives and should be prima facie achievable.
(*b*) That all tasks should relate to the operational requirements, should be expressed in terms of real work which can be allocated to a particular officer or group of officers and that, without necessarily going into detailed systems, the team can envisage a practical method for carrying out the work.

The main problem in this apparently simple approach is that virtually all tasks in a penal institution interlock or interact to some extent and while some of the objectives fall naturally into allied groups and can be worked up in parallel, on other objectives the links are not so easily assessed until the task specifications are actually in draft—the 'yes—but' stage. As far as possible the team is amending drafts to resolve apparent incompatibilities as they go along, using alternative logical paths, but there will be some clashes of priority which cannot be resolved in this way and it will be necessary for Prison Department to

consider the drafts as a whole and adjudicate on problems remaining. The target is to deliver the whole package of draft statements of requirements and tasks to Prison Department via the Steering Committee early in May 1973. The team will then consider the skills/experience required to meet the task specifications as drafted and prepare a 'preferred' allocation of responsibilities (Stage 4) whilst Prison Department is considering the drafts. At this stage the detailed analysis of formal and informal relationships and work involvements already carried out on the data from the eight establishments will be of great value, but it is anticipated that there will be a need for further field-work to investigate particular problems and systems in detail.

The final organizational task will be to weld the 'preferred' allocations—or combinations of allocations dictated by constraints on manning—into a coherent structure.

Ideally, of course, the team should wait until the drafts of task specifications have been approved, but this might delay completion of the review by several months. Either way there are dangers, but if the team succeeds in interpreting the policies and constraints of Prison Department reasonably accurately—and the Department has assisted in this by placing a vast amount of material at their disposal—the amount of unusable work arising from developing drafts before they are approved should not be too great and the risk is considered to be worth taking in view of the potential gain in overall time. The target date for completion of the main organizational and major management method sides of the review is December 1973, but it is possible that further investigation by the team will be required for a few special cases and it is expected that there will be a need for an appreciable ongoing O and M commitment on detailed systems work after that date.

The introduction of MbO at a borstal, referred to earlier, has proceeded in parallel with the activities of the main review team. There has been little liaison or exchange of views between the teams so far, since this would have lessened the chance of obtaining two independent assessments of the problems and solutions. The MbO approach has, of course, been entirely different in that it has been concerned with encouraging managers to think out their own priorities and problems, and taking action to improve the structure within the existing constraints as the assignment progressed. Once the aims of the establishment had been agreed with senior management, a 'bottom-up' approach was adopted; and all line and functional managers were interviewed and assisted in preparing managers' guides.

Inevitably weaknesses in the organization have been revealed with many managers reporting to two or three or more superiors on different aspects of their work and sometimes on the same aspects. Attempts have been made to rationalize the structure so far as possible with a fair degree of success, but, as the main team has found, some aspects cannot be solved at local level and will have to be referred to Prison Department for decisions on priorities and to assist in clarifying roles

and responsibilities. Difficulties have arisen in setting standards of performance, particularly regarding treatment of offenders, which cannot be quantified or accurately monitored, and where differing but legitimate views are held by line managers, apparently carrying out identical jobs in different sections of the establishment. This does no more than reflect society's confusion on the relative values to be placed on different approaches to training, treatment and rehabilitation of offenders in custody, but at least the assignment has brought the differences into the open where they can be discussed and reconciled so far as possible.

Reducing the Flow of Regular Information Returns

D. C. HENDERSON, Procurement Executive, Ministry of Defence

Introduction

Blue collar workers manufacture products whilst white collar workers manufacture reports and records,* and although the ever-increasing mountain of paper has been a matter for concern for many years it is only recently that the problem has received the attention it warrants. In the league table for producers of reports and records the Civil Service is probably quite high, and although most Departments are aware of the rising tide of paperwork, few have tackled the problem seriously. Some have surveyed the field, but have been awestruck by the enormity of the task and, of course, the longer one takes to consider the problem the worse it becomes. Unless someone in a very senior position instructs that paperwork must be reduced, it is unlikely that the problem will be tackled. Assuming the order is issued where does one start? Some Departments have tried an all-embracing 'war on paper'. But these exercises have had varying degrees of success because much depends on the goodwill and enthusiasm of the staff involved. On the other hand attempts at local level to reduce paperwork are unlikely to be as successful as across-the-board exercises because locally there often exists a certain rigidity of thought which assumes that the system in use is sound. To review paperwork against the accepted framework will not

* *The Knox Standard Guide to Design and Control of Business Forms* by Frank M. Knox. Published by McGraw-Hill.

produce savings as great as those which challenge the system itself. But it is not always possible to challenge the system, so what else can we do? Many specialists in this field believe that the most effective way of tackling the problem is to pinpoint a particular part of the paper mountain and then wage all-out war. This is what we in the Management Services Division of the Procurement Executive have been doing for the last six months.

Our Chief Executive instructed us to review all information collected at regular intervals and even in this specialized area and despite earlier departmental 'wars on paper' we have achieved substantial reductions. As the following account records we identified about 2,600 returns, of which some 1,800 were directly challenged resulting in a reduction of 16 per cent. Not dramatic, but certainly worth while.

History

Some readers have possibly never heard of the Procurement Executive so a brief account of its history may be appropriate. The Department was created in 1972 following a government-sponsored investigation headed by Derek Rayner; it is an amalgamation of the old Ministry of Aviation Supply and certain Divisions of the Ministry of Defence. The staff employed total some 75,000 and include administrative and scientific grades at both Headquarters and about 30 outstations. Broadly speaking the Department's task is to ensure that the war-like needs of the three Services are satisfied—from the inception of a new weapons system through the procurement and delivery stages until the equipment is phased out. Until recently the Department was headed by Derek Rayner (now Sir Derek Rayner) as Chief Executive; he has now returned to Marks and Spencer, but he continues as part-time member of the top management board.

Scope of the review

Our terms of reference for the first stage of the exercise were:

(*a*) To collect, classify and analyse the returns.
(*b*) To report on the number of returns in each selected category.
(*c*) To make recommendations on the handling of follow-up action.

Obviously the first step is to collect and classify in some way all regular returns, but this is not easy. What is required is strong top-level support with minimum top-level involvement. For us this meant that as a first step the Under Secretary responsible for MS Division wrote to all Divisional Heads at Headquarters and to Directors at Research and Development Establishments telling them of the exercise and asking them to send one copy of each return they sponsored or sent outside the Department.

Once the exercise was under way we realized that we should have asked for about six copies of each return, but at that stage we did not know how we were going to classify the returns and one copy seemed to be sufficient.

Time-scale for the review

When planning such exercises it is not easy to determine a reasonable time-scale because so much depends on the experience of staff and on the range and complexity of the paperwork received. Allow too much time and the exercise drags on and loses impetus; allow too little and the exercise becomes a scramble and corners are cut. We were, in a way, rather fortunate; our time-scale for the first stage was decided by the Chief Executive who wanted the results within 2½ months. This meant that the team had six weeks to complete their part of the exercise and although this time-scale was short it did provide a challenge and, in practice, was not unreasonable. But we would have preferred to have spent longer on the planning and training stage because time spent on these activities pays dividends later. We allocated our six weeks like this:

2 weeks—to plan exercise, obtain and train staff and organize additional accommodation whilst Divisional Heads, etc., collect and send in their returns.
2 weeks—to receive, register, classify and analyse the returns.
1 week—to draft report.
1 week—to clear report through Branch.

A further three weeks were allowed for the report to be printed and circulated for consideration by senior management.

Staffing

The team was managed by a SEO and a HEO, and our first problem was to assess what supporting staff we needed, but to do this we had to have some idea about the number of returns to be processed. With just two weeks for planning we had to make an educated guess and based our staffing needs on this figure. As things turned out we were remarkably accurate. During the peak of the exercise we had 2 EOs, 5 COs and 1 CA, plus the part-time services of half a dozen O and M assignment staff.

Method of approach

Our first reaction was to ask 'has it been done before?'. So whilst we tackled the staffing and accommodation problems our colleagues conducted a trawl both inside and outside the Service to establish if any similar exercise had been undertaken. The trawl soon revealed that no comparable exercise had been launched anywhere. We were almost on our own—but not quite: the CSD subject officer came up with a suggestion. "Try *The Knox Standard Guide to Design and Control of Business Forms* by Frank M. Knox", he said. "You may find it helpful."

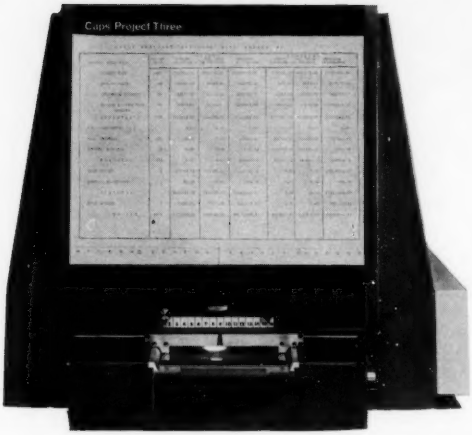
We read what Knox had to say with enthusiasm. Here was a comprehensive account written by a man who had spent 33 years in the field of management consulting. Although the Knox system was designed for

American business use, it was the only guide we had so we just had to get to grips with it. Knox developed a method of classifying forms during the 1940s and his system has been used, with variations, by many major American organizations. Although, as the title indicates, Knox is writing about forms we decided that his methods could be applied to our exercise, because we thought that returns were just a type of form.

Knox believes that before any attempt is made to control forms they must first be collected and arranged in some orderly way. He agrees that this 'orderly way' can and does take many shapes, some more effective than others. But after discussing the various methods he puts forward his system of constructing a *Functional Index*. This consists of a filing cabinet(s) containing folders, each of which contains one sample of every form which does the same thing. It is this phrase 'which does the same thing' that causes the confusion and makes it more difficult than may be imagined to achieve an effective classification. And the way the index is constructed determines whether the exercise is a success or failure. As Knox points out the simplest, and probably least effective, method is to classify the forms by the branch in which they are used, that is, all accounts forms, contracts forms, personnel forms, etc. But this soon becomes a confusing jumble of branch titles, form names and functions. The method most used is to classify by the name or type of form, but this too has its drawbacks and is only effective whilst the compiler remains to operate the index. What Knox suggests as the only really effective method is to classify by subject, operation and function. The *subject* is defined as 'that matter or thing in relation to which an action takes place'; the *operation* as 'the action that takes place'; and the *function* as 'that purpose which the thing or person is supposed to accomplish'. This may sound complicated, but as an aid Knox produced a thesaurus for each of the three classification stages. Our adaptations and work-flow charts are at *figures* 1, 2 *and* 3. We dropped the function classification because all returns should be 'to report' information to management. Once the Functional Index is complete a spread sheet can be compiled—*see figure* 4—which summarizes the contents of the index.

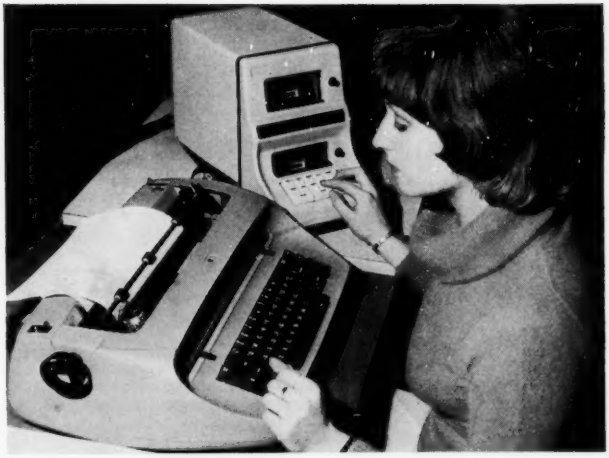
Problems and difficulties

Most of the problems that arose can be attributed to lack of training, but we did discover something that we should have realized earlier: that words mean something different to people depending on their background and training. The thesaurus proved to be the linchpin of the entire exercise. A well-thought-out, clearly defined thesaurus is the key to success, and without this one is doomed to spend much time defining and re-defining what each word means. Another area of difficulty is the actual classification process. Anyone faced with a similar problem should, if possible, use staff that are experienced and have a sound understanding of the Department as a whole. Their knowledge will be most useful when it comes to deciding the correct

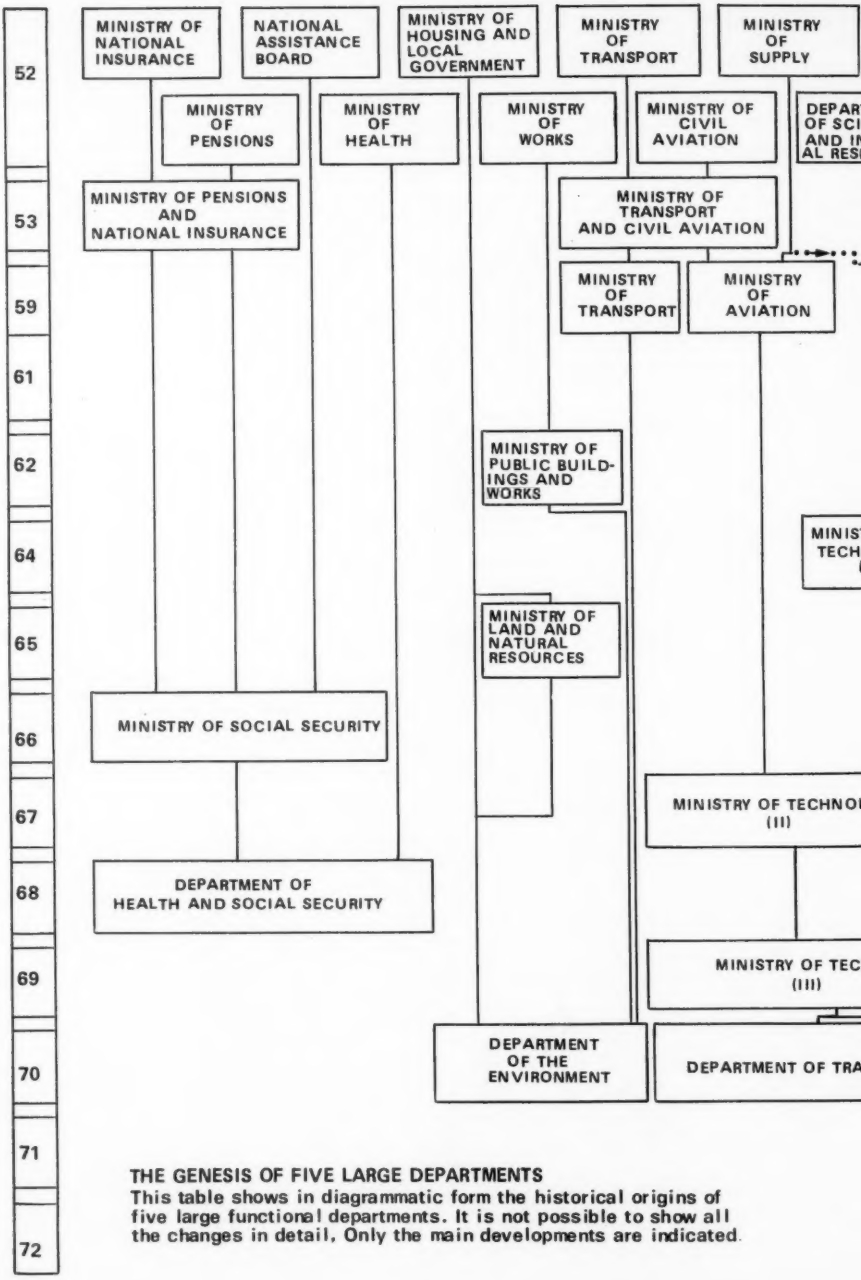


Caps Project 3 Microfiche Reader/Printer

Copex D4000 Microfilm Flow Camera

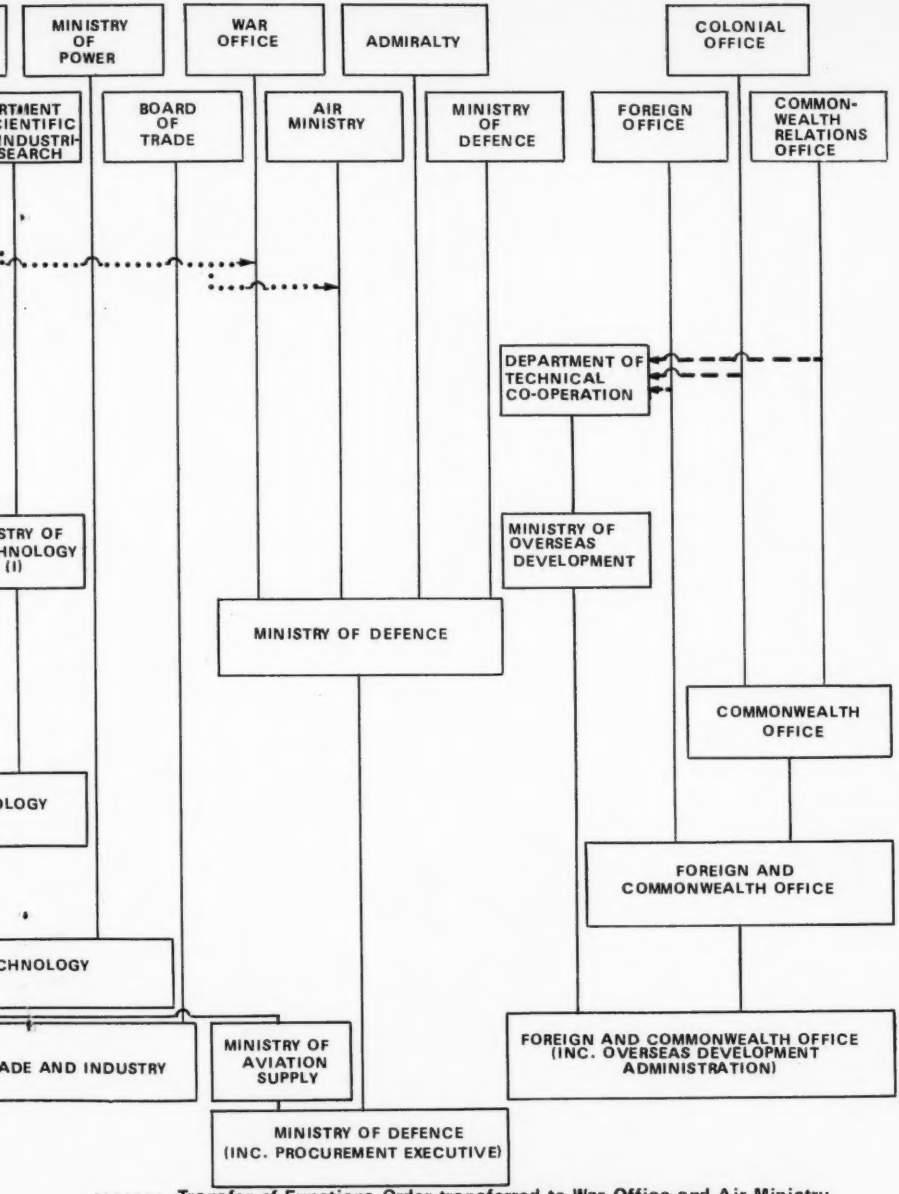


Business Equipment Systems Phase IV Cassetyper

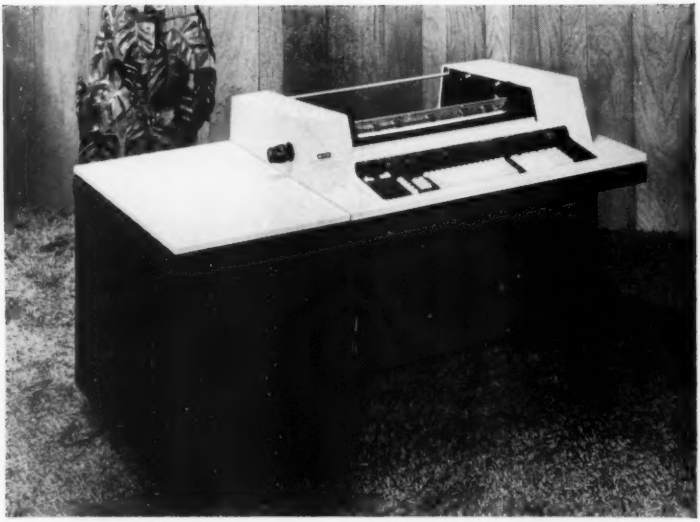


THE GENESIS OF FIVE LARGE DEPARTMENTS

This table shows in diagrammatic form the historical origins of five large functional departments. It is not possible to show all the changes in detail, Only the main developments are indicated.


MINISTRY OF POWER
WAR OFFICE
ADMIRALTY
COLONIAL OFFICE
BOARD OF TRADE
AIR MINISTRY
MINISTRY OF DEFENCE
FOREIGN OFFICE
COMMON-WEALTH RELATIONS OFFICE
DEPARTMENT OF TECHNICAL CO-OPERATION
MINISTRY OF OVERSEAS DEVELOPMENT
MINISTRY OF DEFENCE
COMMONWEALTH OFFICE
FOREIGN AND COMMONWEALTH OFFICE
MINISTRY OF AVIATION SUPPLY
FOREIGN AND COMMONWEALTH OFFICE (INC. OVERSEAS DEVELOPMENT ADMINISTRATION)
MINISTRY OF DEFENCE (INC. PROCUREMENT EXECUTIVE)
Transfer of Functions Order transferred to War Office and Air Ministry certain functions concerning the supply of equipment, etc.
Act established Department which took over the technical assistance work of the other three departments.

Graphiton Dry Transfer Lettering



NCR C399 Accounting Computer

subject for a particular return. Some of our subjects were broad in definition and resulted in far too many returns being collected in one subject/operation packet. As *figure* 4 shows, 'Employee' produced 143 returns under 'Absence of' and 119 under 'Allocation of', and the heading 'Finance' collected 240 returns in 'Return of'. In these, and other cases, we sub-divided the subject heading to get packages of manageable size, and *figure* 5 shows how 'Employee' was broken down. Once we had the spread sheets we called upon HEOs with O and M assignment experience to analyse the results and to highlight those areas where further study appeared to be necessary. We allocated their work by subjects trying to link like with like, and each officer was given a subject or subjects to analyse and asked to suggest follow-up action.

Results and conclusions

When we came to total the response we found that we had received 2,600 returns—which came fairly close to our educated guess of 3,000. We did not expect to receive all returns—the time-scale allowed for Divisional Heads to collect all their returns was too short—but we could see from a superficial examination that we had received sufficient returns to enable us to obtain a reasonably meaningful picture across the entire Department and to make some worth-while recommendations.

The analysts' reports revealed that management was being fed with regular information which varied from the very simple to the extremely elaborate. Some returns were produced on A3-size paper and occupied anything up to 50 sheets. This, coupled with the fact that the information was provided at, say, quarterly intervals, indicated that it was probably out of date long before it was received, and we felt that the originating source should check with the sponsor that the return was in fact still required. Distribution lists in some instances were extensive and we doubted if everybody needed a personal copy. Nil returns too appeared regularly in our analysis, and we had grave doubts about the need for most of these. From the analysts' reports we highlighted seven areas where closer study seemed worth while. Some subjects were peculiar to our Department, but others would almost certainly appear in any similar surveys conducted by other Departments. So much information was called for by management under the heading 'Employee' that it was suggested that a small informal group should be set up to look at the sort of information that management requires under the heading 'Manpower Statistics'. The subject heading 'Work in Progress' revealed a wide assortment of work returns. We were surprised that so many managers apparently still use these as a means of monitoring office effort. In our view they are defensive and serve little real purpose, they are expensive in clerical effort and tell managers no more than they should already know. A typical example is the record kept in most typing pools of typing units completed. This record and any supporting records necessary to maintain it take up considerable time and we wondered if they really do tell superintendents

any more about workload than they already know. As a means of gauging future capacity they are valueless. Returns covering, for example, the number of local purchase orders placed, requisitions cleared and contracts placed, also appeared to fall under this heading; and perhaps the worst example we saw related to the number of flower beds a gardener managed to tend each week! A considerable amount of information is passed to other Government Departments and, whilst most of this can be considered to be necessary, we checked whether similar information was being provided separately for sections within our own Department with a view to the amalgamation of returns.

Follow-up action

We reported under the headings of our terms of reference and recommended that certain action should be put in hand. The Chief Executive and the Management Board agreed that the primary task was to reduce and rationalize existing returns. They felt that the originator was best placed to review the need and purpose of a return. Accordingly, whilst they supported our proposed further studies, they decided that the sponsors of returns should review generally all current returns originating in their own areas.

In addition, it was decided that some form of control to vet all proposed new returns was necessary. Consequently local control centres were to be created and charged with:

(*a*) Arranging for sponsors to check that a return is still required.
(*b*) Checking to see if the frequency or distribution can be reduced.
(*c*) Checking to see what the penalty would be if the return ceased.
(*d*) Challenging all new returns.
(*e*) Instructing sponsors to revalidate all returns annually.

Management Services Division was given the task of challenging returns which went outside the Department.

Presentation

How were we to communicate to so many people details of the follow-up action that was necessary? Our original enquiry had been sent to about 200 branches and, whilst we favoured a face-to-face approach, it was clearly not a practicable proposition to call them all together in one place. So we asked top-level managers in their areas to nominate someone to be responsible for the follow-up action. This had the added advantage of involving top management. We then gave two presentations: the first was attended by the Chief Executive and Secretary, and representatives from the various Headquarters branches; and the second by representatives from the R. & D. establishments. We explained what we had done, why we had adopted the particular method of classification, what the exercise had shown us and what each sponsor now had to do. Each person was handed a glossy brochure, which described the Knox system, copies of the papers put before the

Management Board and copies of extracts from the minutes of meetings. We also enclosed a check list for all sponsors to follow in their efforts to reduce the number of returns. With the benefit of hindsight it would obviously have been far better to have given just one presentation, because this would have brought together both Headquarters and outstation staff, as well as having the advantage of showing all concerned that the Chief Executive and Secretary were both keenly interested. None the less, both presentations were successful. They enabled us to highlight the type of return that we considered to be valueless and gave those attending the opportunity to put their point of view. They also enabled us to explain in detail what each sponsor now had to do. We stressed that top management were committed to the 'exception principle'. And we cited two examples of what we meant. The first concerned the cleaning of office windows by an outside contractor where the bill paying branch would only pay the bill after the occupants of offices had certified that their windows had been cleaned properly; and the second concerned the operation of coaches by an outside contractor where once again the bill could only be paid after users of the coach service had confirmed that the service had been operated satisfactorily. In both cases, using the exception principle, the bill would have been paid provided adverse reports had not been received. Another area we attacked was in the use of 'nil returns', which, whilst letting the recipient know that action had not been overlooked, fulfilled no other useful purpose. We suggested that wherever possible such returns should cease. We asked all sponsors to look most carefully at the supporting systems that provided the information for the return, and suggested ways that these might be simplified. Of course, we also mentioned the doubtful usefulness of work returns.

Time-scale for follow-up action

The time allowed by the Management Board for completion of the follow-up action was 12 weeks. We allowed 11 weeks for sponsors, and ourselves one week to write the report. During the 11-week period we telephoned all representatives to ensure that they had understood what action they had to take and we set about challenging as many returns as we could that were sent outside the Department. Where possible we visited the larger establishments and discussed the follow-up action that representatives had to take.

Results

To date the results have proved most heartening. We set ourselves a reduction target of 10 per cent because a number of commercial organizations had achieved this with procedural exercises designed to reduce paper. But we have succeeded in reducing the overall number of returns by 16 per cent, as well as reductions in distribution, frequency of submission and simplification of information. We even challenged a return to the Civil Service Department (of all places) and found that it

was no longer required. From our discussions with Headquarters and outstation representatives we are certain that many unnecessary returns have now been eliminated and that managers are now more aware of the wide variety of returns produced in their areas. Local control centres have been created and no new return may be introduced without their approval. All returns have to be revalidated annually and this, together with the other measures, should go a long way to ensure that the number of returns in current use is kept to the minimum.

Savings

It is always difficult in assignments like this to quantify the cash savings. What does an average return cost? Much depends on the complexity and frequency, but more important is the cost of the back-up system. A further complication is that a return sponsored by one branch may have to be compiled by many branches and, if this return is modified or cancelled, the resultant savings are considerable. As yet we have been unable to devise a simple yardstick to use, but even so we consider that worth-while savings have been achieved and that the exercise has made a valuable contribution to the 'war on paper'.

Postscript

Apart from the savings what else did the exercise achieve? Well, firstly, it proved that with active top-level support it is possible to get 100 per cent response, which is not always accomplished with exercises like this. But even more important it has demonstrated to middle managers that they really do have to watch very carefully the building of local systems, which solely provide information for some return or other. If there is any doubt at all about the need, the request for regular information should always be challenged.

Figures 1, 2, 3, 4 *and* 5 *which are referred to at pages* 88 *and* 89 *follow at pages* 93 *to* 96.

Subject Thesaurus *Figure 1*

Accident
Accommodation
Accounts — Bill Paying
— Cash
Communication
Complaints
Contracts
Costs
Damage/Defect
Education
Employee
Entertainment
Facility
Finance — Estimate/Long-term Costings
— Forecast/Out-turn
Housing
Land and Building
Medical
Overtime
Plant and Equipment
Postage
Projects
Publications
Registry
Salaries
Security
Stores
Supplier
Tax
Transportation
Travel
Vehicle
Visitor
Work in Progress

Operation Thesaurus *Figure 2*

Absence of
Allocation of
Analysis of
Assessment of
Authorization of
Availability of
Cancellation of
Certification of
Check of
Clearance of
Completion of
Cost of
Defects of
Eligibility for
Forecast of
Housing of
Information about
Inspection of
Location of
Loss of
Movement of
Operation of
Payment to/from
Production of
Programme of
Progress of
Receipt of
Reconciliation of
Recovery of
Repair of
Requirement for
Return of
Review of
Serviceability of
Statement of
Stocktaking of
Storage of
Summary of
Testing of
Transfer of
Use of

Work Flow Chart *Figure 3*

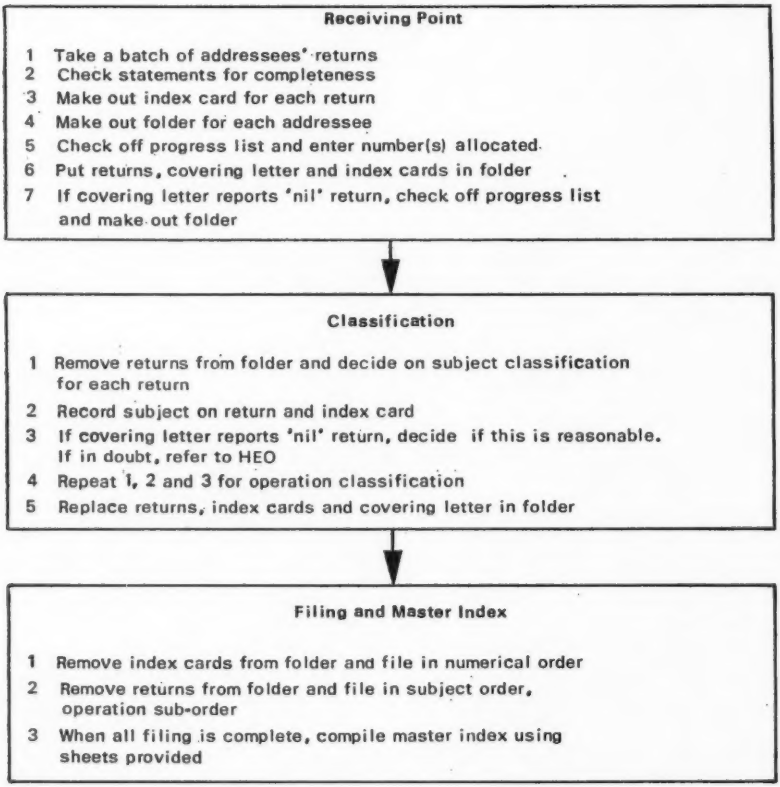

Receiving Point
1 Take a batch of addressees' returns
2 Check statements for completeness
3 Make out index card for each return
4 Make out folder for each addressee
5 Check off progress list and enter number(s) allocated
6 Put returns, covering letter and index cards in folder
7 If covering letter reports 'nil' return, check off progress list and make out folder
Classification
1 Remove returns from folder and decide on subject classification for each return
2 Record subject on return and index card
3 If covering letter reports 'nil' return, decide if this is reasonable. If in doubt, refer to HEO
4 Repeat 1, 2 and 3 for operation classification
5 Replace returns, index cards and covering letter in folder
Filing and Master Index
1 Remove index cards from folder and file in numerical order
2 Remove returns from folder and file in subject order, operation sub-order
3 When all filing is complete, compile master index using sheets provided

Figure 4

Functional Index Spread Sheet *(Part only)*

Subject \ Operation	Absence of	Allocation of	Analysis of	Assessment of	Authorization of	Availability of	Cancellation of	Certification of	Check of	Clearance of	Completion of	Cost of	Defects of	Eligibility for	Forecast of	Housing of	Information about	Inspection of	Location of	Loss of	Movement of	Operation of	Payment of/for	Production of	Programme of	Progress of	Receipt of	Reconciliation of	Recovery of	Repair of	Requirement for	Return of	Review of	Serviceability of	Statement of	Stocktaking of	Storage of	Summary of	Testing of	Transfer of	Use of
Accident																																									
Accommodation																			14			1									1	18				1			1		
Accs/Bill Paying				6																																		5			
Accounts/Cash		71	1						4											5			15				4	20				5							1		
Communication						2																										5									
Complaints																																5									
Contracts			3					1			6	17			1			2														87	18		21					
Costs		3	60																																					
Damage/Defect							1																									4								
Education				4	3									4	1																	4								
Employee		143	19						1	24		1				3	1				36		17									305								
Entertainment												5																												
Facility												23	9							1		8								1			9	1				1		
Finance																																240								
Housing						3						2										1										6			6					
Land and Building		1	11																																					

Functional Index Spread Sheet for "Employee" *Figure 5*

Subject \ Operation	Absence of	Allocation of	Check of	Clearance of	Cost of	Housing of	Information about	Movement of	Payment of/for	Return of
Employee	1		1							53
Aliens										4
At Contractors	1	2								
Disabled										20
Headquarters, Industrial	2	2								
Headquarters, Non-Industrial	39	26		16			1	11		39
Headquarters, Service Officers										2
Medical										8
Miscellaneous									11	17
Outstation	10	6						1		14
Outstation, Industrial	44	27		2				8		35
Outstation, Non-Industrial	46	56		6				16		59
Outstation, Service Officers						3				14
Recruitment/Vacancy										23
Retirement										10
Serving Abroad					1					
Suggestions Scheme										4
Superannuation									6	
UK Staff Serving Overseas										3

MbO in the Chief Inspector's Branch of Inland Revenue

J. E. LAWRANCE AND B. WILKIE, Inland Revenue

Origin of MbO in the Branch

The Fulton report and the activity that followed has directed more attention to management in the Civil Service in all its aspects than anything else for many years. The report stressed the need for a more professional approach to management and encouraged Departments to be highly self-critical in this field. This influence from the top coincided in the Branch with feedback from District level that added casework burdens, inexperienced staff and reorganization of some of the Branch work into large PAYE units and small general Districts were posing local management problems. A management consultant's report had commented that management was not given sufficient attention in Districts and that morale and job satisfaction could be improved. There was a case for more attention to the effective follow-up of management decisions, better definition of responsibilities, more scope for group leaders in management and more thorough planning of work programmes.

The situation therefore was that Inspectors were faced with unfamiliar management problems and it seemed likely that management styles which had stood the test of time in traditional districts of, say, 50 staff needed some rethinking and supplementing. In addition the management at the computer-based Schedule E Centre (Centre 1) was faced with the problem of consolidating a very large office after formation and establishing a style of management that permitted participation at each level, but related the parts of the organization to the whole.

In November 1969, a Study Group was set up to consider problems of District management and to examine whether current management techniques and thinking had anything to offer the Branch. It found that what was needed was a style of management which enabled managers at all levels from group leader upwards to take more part in the process of planning and reviewing work and thereby become more committed to those plans. It also favoured a more systematic approach to management and one which related at each level with the aims of the Branch as a whole. This led the study group to examine the process known as management by objectives and to propose a pilot scheme. The Study Group has continued to act as a steering committee for the extension of MbO work in Districts.

The use of MbO in the Branch

The emphasis in the Branch use of MbO has been on management

effectiveness. In other applications stress has been placed on other aspects—such as using MbO to identify weaknesses of organization, to propose changes in procedure, as a method of management training and as a link with staff appraisal schemes. Apart from the last point each of these features has been present in the use of MbO in Districts, but only as subsidiaries to the main aim of strengthening the standards of management.

As regards staff appraisal, MbO has been kept quite separate from reporting on the ground that free discussion of objectives between a manager and his superior (and subordinates) would be inhibited if it was too closely related to judgment on performance. The two are obviously connected, but in the Branch view should be distinguished as far as possible.

The aim of MbO then is to develop full effectiveness in a manager and (in the Branch context) to do this certain needs should be fulfilled:

(*a*) He should have a clear idea of the aims of the Branch and the contribution required from his group, section or District.
(*b*) He should know what he is expected to achieve and the precise area of his responsibility.
(*c*) He should be allowed, and indeed required, to determine the objectives of his unit over a prescribed period and to discuss and agree these with his superior before implementation and then to have a genuine opportunity to carry them out.
(*d*) He should plan the objectives for his unit with the aims of the Branch firmly in mind.
(*e*) When setting his objectives the manager should decide what controls he needs so as to provide clear evidence of whether the standards set have been achieved.
(*f*) Both he and his staff should always be alive to the need for identifying constraints which hinder greater effectiveness and to initiate changes in organization or procedures. He should be ready to take action either himself or through his superiors to remedy or alleviate the situation.
(*g*) He should ensure that the staff working for him, whether they have a managerial function or not, are aware of what is expected of them and have an opportunity to express their views on how the job could be done more efficiently or to a better standard.
(*h*) There should be easy access to help and guidance from the section Inspector or District Inspector (DI) as the manager needs it and sufficient training resources outside the District.
(*i*) The manager should know when the objectives will be reviewed with his superior and what information will be required of him.
(*j*) He should expect to have feedback on his management performance.

The decision having been reached to try MbO, detailed planning and control of District work in this field was undertaken by the

Management Services Section of the Branch. Centre 1 management had their own MbO team, but the procedures followed have been similar to those in Districts. In addition to the Centre 1 project, 20 Districts with over 5,700 staff, including 680 managers, are now involved in MbO, and current planning is to extend MbO to all large concentrations of PAYE staff during the next two years. MbO figures in all Branch management training courses for Tax Officers (Higher Grade) (TOsHG), Inspectors and DIs, so that some acquaintance with the subject is now widespread amongst managerial grades.

MbO, as we have seen, involves a thorough review of organization, methods, attitudes and procedures by each manager. This is very difficult to do properly without some outside stimulus. The use of independent MbO specialists was therefore recommended and a team of five Inspectors (Higher Grade) and Senior Inspectors assembled in May 1970, from various Head Office Sections—Organization, Management Services, ADP, and Training; later the team was expanded and brought within the Management Services Section. Relatively senior officers were chosen because they would be talking in detail to all District staff from DI downwards about their management performance and their work. Outside consultants were not engaged because the Branch could provide advisers sufficiently remote from line management but who were people completely familiar with District conditions and who, it was felt, would fit into the picture more easily than complete strangers to the District. There is no reason to regret this decision.

Each adviser has attended a two-week practitioner's course at CSD. This is a suitable blend of theory and practice on which quite extensive in-Branch training can be built. The latter has consisted of a series of meetings at which papers on all aspects of MbO as it would be used in Districts were discussed. This and other material formed the basis of an MbO Adviser's Handbook which has been used as a starting point for the training of subsequent advisers. The preparation of the handbook has also ensured that a reasonably consistent procedure was followed by each adviser. Meetings of advisers have been held at monthly intervals to discuss common problems, to ensure a common approach to the work, and as a means of self-development. Detailed written reports have been made by the advisers after setting up and after each review.

One of the main features of MbO is the linking of each level of management in setting objectives and it follows logically, therefore, that it is important that top management should be involved if the scheme is to stand a good chance of success. Several commercial applications have, indeed, failed precisely because MbO was introduced to middle management without any involvement at Board level. Contradictions then tend to arise and enthusiasm wanes because commitment is absent at the top. In this Branch the Chief Inspector provided a statement of Branch aims and the first step in implementation in all Districts was a personal briefing of DIs by the Deputy Chief Inspector, who has

followed this up by visits to MbO districts. The link with top Branch management is thus evident to the staff in Districts.

Both staff associations were consulted on the formative plans for MbO work in Districts, and DIs concerned were asked to ensure that their Office Whitley Committee had ample opportunity to discuss the proposed use of MbO in the District. Those who have been concerned with the practical work on MbO are most grateful for the constructive criticism and help given by staff association representatives and their understanding of what is being attempted.

The method of implementation

Each DI was briefed by the Deputy Chief Inspector and then spent some time with Branch Management Services who introduced the adviser and explained what MbO would involve for the District, what the hoped-for advantages were and the possible difficulties in applying the method. The District programme was arranged between the adviser and the DI who was asked to draft the District aims in readiness for the introductory meeting, bearing in mind the Branch aims, a copy of which had been given to him by the Deputy Chief Inspector.

Although they may have felt that they did not have much option to protest against selection all the DIs have proved willing victims. They have taken an interest in MbO and have given the scheme full backing in their Districts. This support from the DIs has been invaluable to the success of the work of the advisers. The DI is the District strategist and his lead on management sets the tone for the rest of the office. Indeed, in the one or two instances where the DI's attitude was less committed the advisers have had a much more difficult task. From the beginning the advisers have stressed that MbO is not something that is being run by Head Office, but that the District itself has the opportunity and responsibility of making the most from this style of management; the adviser is there merely to guide district management over the initial stages.

Since it is the District staff who will engage in MbO if it is meaningful, the adviser proceeds by explanation, persuasion and reason and not by imposing supposedly ideal solutions. Lip service to MbO is quite inadequate. Hence it is important that everyone likely to be involved understands at the outset how MbO will affect them, what it involves and the principles underlying the method, and also has ample opportunity to raise questions, express doubts and fears.

The introductory briefing in Districts consists of one or more half-day meetings of all managerial grades (including those solely engaged on casework) and the adviser follows this with short talks to groups of TOsHG and their Inspector to explain their part in the scheme and to deal with any further questions. Further meetings are also held with junior grades so that they know something of what is going on.

During the introductory stages a number of hand-outs are available for issue to the District staff as the adviser thinks fit. In most Districts there have been several officers who have been particularly interested

in management and who have followed up what was said and handed out at the introductory meetings with reading on their own initiative.

The evolution of aims and objectives proceeds by means of discussions between individual managers and the adviser. These discussions are the central feature of the introduction process and by far the most time-consuming element. Since the adviser is encouraging the manager to unfreeze and engage in management rather than accommodate to it, this is more likely to come in informal individual discussions rather than in group meetings where all sorts of pressures and influences can easily stifle thinking.

The programme of interviews is as follows:

(*a*) The DI prepares a statement of District aims for distribution at the introductory meeting and drafts an analysis of his area of responsibility and of how he in fact divides his working time. This is on the lines of a conventional job description. At this stage, however, he does not prepare the detailed objectives for the District. The District aims are individual statements, but tend to follow closely on the Branch aims.

(*b*) Each management Inspector does likewise for his section or floor.

(*c*) *First interview: job description.* The same stages are then undertaken by each group leader and during the first interview the adviser uses the draft job description which has been prepared by the manager to consider with him such questions as:
What is the unique contribution of my job?
Why is the position needed?
What changes if I am highly effective in my job?
What authority does the position really have?
Why do I follow certain procedures?
What changes would I concentrate upon if the group performance is to be improved?
How do I know whether my staff are performing satisfactorily?
What do I mean by satisfactorily?

In this way the group leader analyses his work, the aim being for him to reach a better understanding of the purposes, the strengths and the weaknesses of his job. Even the effective manager will almost certainly benefit from such an analysis. This stage has been extremely useful in starting group leaders and Inspectors on the process of thinking about their job in a more constructive way than they had done previously. The sort of problems that have tended to come to light are: weaknesses in the group, section or District organization; blurred responsibility; shortcomings in communications; lack of planning; too much control from outside the group; too little guidance on what is expected; lack of confidence or experience by the group leader; and too much emphasis on the maintenance of existing procedures without considering whether

these lead to the most direct achievement of the aim of the District, section or group.

If there are problems of this kind, much of the value in the discussion is that the manager has diagnosed them for himself and has an opportunity to propose remedies. The adviser may be able to suggest ways round the problem and will recommend that the subject is brought up in discussion with the section Inspector at the agreement interview (*see* (*e*) below). Most District managers begin to appreciate at this stage that there is rather more in MbO than they thought and that analysing their job in this way brings a new understanding.

The first interview normally lasts between 1½ and 2 hours and following this the TOHG is asked to draft his key areas, standards and controls and to identify any points on which he feels that procedures or organization could be changed to permit his group to achieve improved standards. Together these will constitute his management objectives. The first attempts are usually rather sketchy and are considered in detail at the second meeting with the adviser.

(*d*) *Second interview: key areas.* After sufficient thinking time has been allowed there is a second interview, which takes on average 2–2½ hours, to consider *key areas*. Discussion on key areas and objectives is the main opportunity for sorting out management problems —and for devising improved procedures.

Having identified the key areas these are then sub-divided into one or more *key tasks*, e.g. a key area such as control of PAYE programme work will cover key tasks such as assessing, coding, returns issue and so on, and for each key area and key task the manager sets his standards. He also specifies the controls he requires to enable him to say at the review whether the standards set have been achieved. Most group leaders and Inspectors have needed considerable guidance from the adviser on this. The adviser lays stress on making the standards as specific as possible and they will normally cover quality in addition to time and quantity. The practical significance of this is that three or four months later the manager has to describe to his superior how far his objectives have been achieved. General statements are likely to be unimpressive and hence the emphasis is on quantitative measurement and adequate management controls. This is not, of course, a feature unique to MbO.

The end-product of this stage is that the manager drafts a *manager's guide* which sets out his key areas and tasks, standards, controls and improvement suggestions and will act as the basis for his management duties. There has been assistance from the adviser, but it is most important that the guide should remain basically the manager's own effort. Many of the guides are imperfect, but the adviser prefers that the manager finds out the limitations for himself.

(*e*) *Third interview: agreement with superior.* The next stage is that the group leader meets his section Inspector with the adviser, and the draft guide is discussed in detail. The aim of this session is to enable the Inspector to ensure that all his group leaders are working in harmony with his section aims and also to discuss, amend if necessary and agree the group leader's guide, and to allow him clear responsibility and commitment to carry out the objectives for his group.

The process described in (*c*) to (*e*) in terms of the group leader and section Inspector is then followed for management Inspectors and the DI.

In the early discussions on MbO it was thought that it might be practicable for the DI to prepare his guide first and then for the Inspectors to do theirs and finally the group leader would complete his. Experience has shown that DIs and Inspectors cannot prepare their guides satisfactorily until the group leaders have done theirs, although preparatory work is possible. Furthermore, by having the first go the group leader is not inhibited by what his superiors have set down. He does, of course, have the aims of the Branch, District and section which indicate the broad lines within which he should plan. The agreement interviews have been found to give sufficient safeguard for the Inspector to avoid conflict between group objectives. In practice the agreement interviews have given rise to relatively few amendments and no irreconcilable arguments.

Before the adviser leaves the District after setting-up he normally takes part in a meeting or meetings of managers to clear up any remaining queries or doubts and he will have ensured that adequate machinery exists to deal with the suggestions.

Three or four months after MbO has been launched the first review takes place. On the first occasion a round of interviews between the manager and the adviser, and the manager, his superior and the adviser, takes place similar to those on setting-up. The object is for the manager to examine in detail the objectives in his guide, to demonstrate by reference to his control records what progress has been made towards achieving the objectives and either to revise objectives for the coming period or to set new ones for additional work. As before, this is agreed with the superior and a new batch of improvement suggestions may well be forthcoming. This process is repeated at 3–4-month intervals with the adviser playing a progressively smaller part. Where there are major changes of resources or work in the intervening period the guides may need revision at shorter intervals.

Throughout the setting-up stage and subsequently, managers are encouraged to bring forward suggestions for improved procedures or organization which would permit them to achieve better standards. Some suggestions come from the manager himself, others come from his staff; some can be dealt with within District jurisdiction, others have to

be referred to Head Office and the total to date (excluding Centre 1) is just under 800.

What of the 'cost' of MbO? The setting-up process of interviews and meetings takes about 10 hours for each manager plus a much smaller amount of time for other staff without management duties. This does not include preparatory work for the interviews. Each review occupies, say, four hours for each manager. Thus for a Regional District the first 12 months of MbO might require between 800 and 1,000 hours plus an indeterminate amount of thinking time. The adviser will be in the District for perhaps 15 weeks. For subsequent years the cost might well be 500 hours with no adviser involvement. For standard Districts the cost is about one-third of this. Apart from some 'capital cost' in the first year most of the time should be gained from a replacement of activities in other management methods.

Results of District MbO work so far

An evaluation study of the impact of MbO in the first five pilot Districts has been completed. These Districts had all been using MbO as their style of management for just over 12 months and this was considered to be the minimum period on which any judgments could be based. During the first year a great deal of trial and error is inevitable as standards of work and controls are evolved. It is really only in later periods that the system is working on a permanent basis. On the other hand, if the review is left too long memories of the old order fade and a comparison becomes difficult. In dealing with changes of management style and attitudes 12 months is a very short period on which to base judgments.

The evidence used in the study fell into three categories:

(*a*) Impressions and opinions of how MbO was working in practice from the advisers and also from visits to the five offices by the Deputy Chief Inspector.

(*b*) Two questionnaires which were issued to District staff involved. The first and more detailed one went to all TOsHG, Inspectors and DIs (some 200 staff) whether these were doing managerial work or not. The second simpler questionnaire went to all Tax Officers and Clerical Assistants (some 500 staff). Both relied mainly on the 'tick in the box' type of response, but in both narrative comments were also invited and made.

(*c*) A review of work statistics.

It is difficult to summarize adequately in this article the mass of evidence obtained under (*a*) and (*b*), but the advantages and limitations of MbO in the Districts so far may be stated as follows:

Clear advantages gained from MbO

- More interest in practical management at TOHG, Inspector and DI levels.

- More thought about the nature of the management job.
- MbO is a flexible system which can accommodate most types of work and personality.
- More emphasis on forward planning and follow-up of management decisions.
- Better interaction between management levels.
- Development of the management function of group leaders (TOsHG).
- Clearer definition of responsibilities.
- Encouragement of new ideas on procedures and District organization.
- More involvement and commitment to setting and achieving objectives by group leaders and Inspectors—and to a lesser extent involvement of junior staff in this.
- Emphasis on a more precise quantitative system of work objectives.
- Guidance to junior or inexperienced managers as to what is expected of them.
- A well-defined system of management reviews on an individual basis.

Limited assistance from MbO—further development possible

- Planning and control of casework of TOsHG and Inspectors.
- Tackling the measurement and improvement of quality standards.
- Finding more scope for initiative at District level on making procedural changes whilst not threatening the principle of equality of treatment of each taxpayer.
- Linking District management with Branch training.

As regards (*c*), attempts were made to evolve some form of performance indicator which would isolate the management factor so enabling some quantitative judgment on MbO to be made. Whilst this is theoretically possible it was found that the time required for recording and analysis would be prohibitive and even so the results would be open to criticism as being influenced by factors other than MbO. Reliance was therefore placed on a close scrutiny of the statistics readily available (mainly the monthly reports for the District as a whole and similar subsidiary records for the sections and groups within the District). This analysis was made in the knowledge that such influences as the staffing position, changes in workload, sick leave, training and calibre weightings—not to mention the postal strike in early 1971—must be taken into account as well as the effectiveness of management in assessing the performance of the District. As a result it is impossible to say with any certainty that MbO made a direct contribution to the change in the overall work position between November 1970 and November 1971. In four of the five Districts it is, however, clear that performance on both programme work and post was generally better than for the preceding period in the four Districts and also as compared with the national performance for similar Districts. In the fifth District there were identifiable reasons which were not present to nearly such a

marked degree elsewhere which affected adversely the work statistics during 1971. In a cautious way, therefore, it is possible to detect signs that more effective management does bring improved performance even in these early days of MbO.

With the introduction of MbO into considerably more large offices, lessons learned in the first five Districts are being put to good effect and so far as one can tell at this stage the response to MbO in the later Districts has been similar to that in the first five.

The strength of the MbO style of management seems to rest in the very close and practical relation to the manager's own situation, but considerable determination and willingness to accept change is needed from all concerned if management is to make effective use of MbO principles. Drucker's original phrase 'Management by objectives and self-control' still places the emphasis in the right place—on the manager's responsibility and commitment and his ability to question and control his own performance and that of his subordinates. Management Services can provide an initial impetus and suggest certain processes, but this is comparatively unimportant compared with the response expected from District management themselves. On the evidence so far a promising start has been made.

Management Consultants in Government

We have from time to time published lists of management consultancy assignments commissioned by Government Departments. The last such list, covering the calendar year 1971, appeared in the August 1972 edition of the *O & M Bulletin*.

A list of such assignments commissioned during the calendar year 1972 now follows. The list excludes:

(*a*) Assignments in the National Health Service.
(*b*) Computer consultancy (including assistance with computer systems and programming).
(*c*) The employment of consulting staff, whether on secondment from their firms or not, to augment departmental teams.

Department	*Nature of assignment*	*Consultant used*
Ministry of Agriculture, Fisheries and Food	A study of the arrangements for implementing certain intervention subsidies	Cooper Brothers & Co. Ltd. (Now Coopers and Lybrand Associates Ltd.)
	Advice on the installation of MbO in the Divisional Office at Oxford	Urwick Orr & Partners Ltd.
Cabinet Office and Department of Trade and Industry	Study on potential benefits to British industry from offshore oil and gas developments	International Management and Engineering Group of Britain Ltd.
Civil Service Department ..	A survey of the Department's accounting system	Cooper Brothers & Co. Ltd. (Now Coopers & Lybrand Associates Ltd.)
Ministry of Defence	A comparative study of the use of multiple regression analysis to assess labour requirements for domestic cleaning in Army establishments	Inbucon/AIC Management Consultants Ltd.
	A study of trade averaging in connection with job evaluation in the Armed Services	Inbucon/AIC Management Consultants Ltd.
	Study of staff deployment and career development	Institute for Operational Research
	Design of a system for providing life cycle costing of equipment in the Army Department	Peat, Marwick, Mitchell & Co.
	Introduction of MbO into the Quality Assurance Directorate	Urwick Orr & Partners Ltd.
Department of Employment ..	Feasibility study of the scope for training in limited skills in the Cardiff area	Industrial Training Service
	To identify the nature and extent of key training requirements	Industrial Training Service
	Operational research consultancy to a study of the Wages Inspectorate	MLH Consultants Ltd.
Department of the Environment	To conduct an urban study of goods movement in Swindon	Atkins Planning
	Critical Path Networks for the Third London Airport project	Atkins Planning
	A study of the compatibility of project management systems for the Third London Airport	Compunet Ltd.

Department	*Nature of assignment*	*Consultant used*
Department of the Environment (*continued*)	Advice on management techniques to aid project appraisal and research programme planning in the Transport and Road Research Laboratory	Corporate Management Consultants Ltd.
	Management accounting in Supplies Division. Further stages	Deloitte, Robson Morrow & Co.
	Review of incentive scheme in Supplies Division	Inbucon/AIC Management Consultants Ltd.
	Cash flow model for New Towns and local authorities	Logica Ltd.
	International highways comparison project	Metra Consulting Group Ltd.
	Written report on an outline financial planning model for New Towns developed during an earlier consultancy	Peat, Marwick, Mitchell & Co.
	To examine possible applications of locational referencing and the requirements of users	Peter Ward (Interplan) Ltd.
	Consultancy services to the Steering Group on financial and economic objectives for Regional Water Authorities	Scientific Control Systems Ltd.
	Processing of the 1966 National Travel Survey	Scientific Control Systems Ltd.
Export Credits Guarantee Department	To recommend a revised accountancy system for the Department	Touche Ross & Co.
Department of Health and Social Security	To construct an out-patient care event model	Arthur Andersen and Co.
	A further study of the ambulance service organization in metropolitan counties	Hoskyns Corporate Studies Ltd. (Now John Hoskyns & Co. Ltd.)
	A survey of private medical care	Lee Donaldson Associates
	To study the cost and implementation problems of various policy options in the field of patient care	Novy Eddison and Partners
	A review of the meals-on-wheels service	PA Management Consultants Ltd.
	Advice on resource allocation to patient care under various policy options	Scientific Control Systems Ltd.

Department	*Nature of assignment*	*Consultant used*
Department of Health and Social Security (*continued*)	Introduction of MbO into Central Office, Newcastle upon Tyne	Urwick Orr & Partners Ltd.
Home Office	Further work on the implementation of a management control system for prison industries	Inbucon/AIC Management Consultants Ltd.
	Organization and cost of fire prevention in a large brigade	Inbucon/AIC Management Consultants Ltd.
	Feasibility study of the cost effectiveness of fire prevention measures	Peat, Marwick, Mitchell & Co.
	Further stages of the study of police vehicle maintenance	Scientific Control Systems Ltd.
	Study of control systems in the fire service	Software Sciences Ltd.
Department for National Savings	Review of Savings Group statistics	Arthur Andersen & Co.
HM Stationery Office	A preliminary review of printing establishments	P-E Consulting Group Ltd.
Department of Trade and Industry	A study of the UK shipbuilding industry	Booz Allen & Hamilton International NV
	Preliminary survey of accounting information requirements	Cooper Brothers & Co. Ltd. (Now Coopers and Lybrand Associates Ltd.)
	Study of prospects of certain air transport systems	J. C. Floyd & Associates
	Introduction of MbO into the regional organization	McLintock Mann & Whinney Murray
	A study of the movement of passengers and baggage at Heathrow airport	Metra Consulting Group
	Study of motor cycle industry world markets	PA Management Consultants Ltd.
	Study of motivation of exporters	Taylor Nelson (Industrial) Ltd.

New Office Equipment

This section contains a description of new items of office machinery and equipment. Inclusion of any particular item is not to be regarded as an official recommendation nor as indicating that it will necessarily be available to Government Departments.

NCR C399 ACCOUNTING COMPUTER

Marketed by National Cash Register Company Limited,
206–216 Marylebone Road, London NW1 6LY

The NCR C399 Accounting Computer, which is illustrated opposite page 87, is aimed at providing electronic data processing for the smallest of potential users by combining the simplicity of a keyboard accounting system with the computational capabilities of a computer.

The heart of the C399 is a high-speed mini-computer with a core store capacity of up to 16,000 alpha characters. The system has been designed in such a way that it can be expanded as the workload increases, and a wide range of peripherals can be attached on-site, including paper tape input/output, punched card input/output, line printers, auto ledger reader and disc. The program is internally stored and is loaded from magnetic tape cassette in a few seconds. The cassette station can also be used for data, and a second station can be supplied; average cassette capacity is 160,000 characters.

The C399 uses high-capacity magnetic stripe ledgers with up to 1,500 characters per card. The 22 in. carriage has a split platen with auto line find for magnetic stripe or non-magnetic documents to the right- and left-hand side of the split. The carriage can handle simultaneously a number of different documents, and two types of continuous stationery can be used at the same time.

The console printer is of the moving 'golf ball' type, with a print speed of 20–24 characters per second. An alphabetic and 10-key numeric keyboard is standard with an option of a full keyboard if required.

List price of basic machine £6,800

PHASE IV CASSETYPER

Marketed by Phase IV Business Equipment Systems,
86 Park Road, Baker Street, London NW1 4SH

The Phase IV Cassetyper comprises a typewriter unit—based on the IBM Selectric 15 in. carriage typewriter modified to solid state electronics—and a magnetic tape unit equipped with two tape stations.

Each magnetic tape cassette has a storage capacity of 350,000 characters and will operate the typewriter automatically at a speed of 175 words per minute. A useful feature is the 200-character buffer store, which enables the operator to put every line of type into memory

before typing the hard copy. Other standard features are a fast search at 6,000 characters per second for forward and reverse, 100 reference positions, tape-to-tape duplication at 400 characters per second and skip control of 400 characters per second.

Further information about the machine, which is illustrated opposite page 86, and details of price may be obtained from the company.

SELECTRIC 82C CORRECTING TYPEWRITER

Marketed by IBM United Kingdom Limited,
101 Wigmore Street, London W1H 0AB

The correcting facility of the Selectric 82C typewriter, which has recently been introduced, is based upon a new correctable film ribbon—giving up to 120,000 character impressions—combined with a special 2,000 character 'lift-off' tape that removes errors without leaving a mark.

When an error is made, the typist presses the correction key, which backspaces the single element 'golf ball' to error and engages the lift-off tape mechanism. When the faulty character has been removed the 'golf ball' stays in the same position, so allowing the typist to insert the correct character and continue typing. The correcting facility works for all normal correspondence paper irrespective of colour.

Further information about the machine and details of price may be obtained from the company.

OZALID 165 DIAZOPRINTER AND COLLATOR

Marketed by Ozalid Company Limited,
Langston Road, Loughton, Essex

The latest addition to the Ozalid range of office equipment is the 165 Diazoprinter and collator, which is a semi-dry dyeline copier with a 20-station collator. The 165 will print from originals up to a maximum size of 19 in. × 16 in. approximately and a minimum size of 8 in. × 5 in. approximately. The print-out speed is variable, approximately 3,300 A4 copies and up to 1,650 A3 copies per hour. It will feed automatically from 1,000 A4 sheets or 500 A3 sheets, and has master retention with a dialling facility of up to 99 copies.

The light source is a 1·6 kW lamp, variable from 1·3 or 1·1 kW, and two drying rollers of 750 W each. Delivery can be direct to the collator at rear or front if required. The 165 will handle varying weights of sensitized paper from lightweight to card. The collator with 20 bins will hold up to 50 sheets.

Dimensions of the 165 are: height 46 in.; width 43 in.; and depth 69 in. Weight is 1,027 lb.

List price £3,700

GRAPHITON DRY TRANSFER LETTERING

Marketed by Ozalid Company Limited,
Langston Road, Loughton, Essex

Graphiton FP film is a new material for producing dry transfer lettering, with the advantage that the user can produce lettering, symbols and designs without any waste of material. The film is supplied in A4-size sheets and may be obtained in four colours: black, white, red or blue. It is a 0·002 in. polyester base film and has four coated layers: a release coating, a layer of ink, a layer of adhesive and a resist layer.

The original must be a photographic negative, preferably laterally reversed, of the image required. This negative is placed in direct contact with a sheet of Graphiton film and exposed under ultra-violet or intense fluorescent light (a dyeline machine can be used for this exposure). The film is swabbed with a soft sponge using a Graphiton FP developer until the background has been removed, leaving a clear image, which must then be rinsed in clean water and dried. Using the dry transfer sheet and rubbing down from the front of the film, the image will adhere to any surface free from silicon or grease. Approximate cost per A4 sheet is 10p.

Further information about the system, an illustration of which appears opposite page 87, may be obtained from the company.

CAPS PROJECT 3 READER/PRINTERS

Marketed by Caps Microfilm Limited,
7 Westmorland Road, London NW9 9RG

The Project 3 range has its origins in the Atlas Microfiche and Mercury open spool/Caps Cassette readers. The equipment embodies an electrostatic processing system of Caps' design, features of which include: pneumatic paper feed; minimum toner consumption; and automatic exposure adjustment to achieve good prints from images of varying densities and/or contrasts.

Specifications common to both models are: COM screen 11 in. × 14½ in.; print size up to 11 in. × 14 in.; and print speed, six per minute at 1·25p per A4 copy.

The fiche model accepts both microfiche and jackets to all standard and COM formats. The fiche carrier incorporates click-stop location for rows with prominently positioned scale and pointer for frame selection. A twin lens turret and double fiche carrier are optional extras. The roll film model offers use with open spool or the Caps 'drop in' cassette. The machine also retains the two-directional push-button speed control associated with the Mercury reader.

The introduction of the Project 3 range, an illustration of which appears opposite page 86, does not mean the phasing out of the Project 2 (PJ 200 series) 'free-standing' reader/printers.

List price: fiche model, £850;
roll film/open spool model, £950

COPEX D4000 MICROFILM FLOW CAMERA

Marketed by Agfa-Gevaert, Brentford, Middlesex

The D4000 provides facilities for high-speed filming on 16 mm film of large volumes of documents up to 12 in. in width. The paper transport mechanism operates at 130 ft. per minute. Interchangeable film units enable recording of documents at reduction ratios of 23:1, 34:1 and 45:1. In addition to simplex (single) imaging, the two higher reductions allow duplex (back and front) and duo (twin-track) formats.

An unusual feature is the 'parallel film system' in which two film units are mounted side by side, and recording (of the same originals) can be carried out simultaneously on two films at different reduction ratios. The camera is illustrated opposite page 86.

Operator aids include: built-in document counter and film footage counters to each film unit; optical signal and automatic feed cut-out at end of film; optical and acoustic signals when the desired format does not match the appropriate film unit(s); optical and acoustic signals and automatic feed cut-out in the event of any breakdown; and automatic indication of feed width to suit the required reduction ratio. Other controls and accessories include: film spacer control on each film unit; semi-automatic exposure control in the form of pre-select voltage buttons; automatic feed hooper; and hand-feed shelf.

Dimensions of the D4000 are: width 25 in.; depth 24 in.; and height 16 in. Net weight is 88 lb.; and weight of film unit is 8 lb.

List price: basic unit, £1,600;
film unit, £360

EPC2 MASTER-MAKER FOR 'ROTACOPY SYSTEM ONE'

Marketed by Rotaprint Limited,
Rotaprint House, Honeypot Lane, London NW9 9RE

Rotacopy System One is a designation given by Rotaprint to their combination of desk-top office offset (the TTR) with an electrostatic desk-top copying/master-making device.

A new version of the latter has been announced which, combined with a zinc-oxide master material and toner, has extended the application of the package to other kinds of reproduction, for example, up to 1,000 prints from a master which is punched and clamped at both ends. Straight-edge masters clamped at the head only may not yield more than 100 or so prints. The company claim that contrast, resolution and solid density all show great improvements.

The EPC2 is a twin-feed system, from a roll or by single sheet, with a dialling facility for copies and with a maximum copy size of 10 in. × 14½ in.

Further information may be obtained from the company.

PITNEY-BOWES MODEL 262 ELECTROSTATIC COPIER

Marketed by Pitney-Bowes Limited,
The Pinnacles, Harlow, Essex

Pitney-Bowes are adding another flat-bed model to their range of electrostatic desk-top copiers. It is the Model 262 'Wide Angle' Copier —a high-speed machine for high volume copying of large originals.

The 262 will copy any original up to 11 in. × 14 in. and reduce to A4-size for easy filing. With the use of high-speed strobe flash for exposure, it will multi-copy at a speed of 30 copies per minute and will produce a single copy in about six seconds.

It is claimed that the touch-of-a-button reduction feature reduces stationery and labour costs: in the production of information sheets for multiple distribution, for instance. If data runs on to a second page, the cost of additional paper, collating, stapling and hand folding can be eliminated by laying all information on one larger sheet and then reducing it while running off copies. Multi-page reports can be prepared on larger pages in the same way.

The use of a strobe flash avoids heat build-up in these high volume copying operations. The paper, which is fed from a self-storing roll by means of a vacuum hold, thus avoiding clogging, is always within easy reach of the operator.

Further information about the 262, and details of price, may be obtained from the company.

DICTAPHONE 'THOUGHT TANK'

Marketed by Dictaphone Company Limited,
Alliance House, 12 Caxton Street, London SW1H 0RD

The 'Thought Tank' is a form of remotely controlled dictation and consists basically of three units: a telephone-like handset for the dictator, a central processing unit and a typist's control unit. The system may, however, be extended to allow for up to six dictators to have direct access.

The dictator's instrument has a warning light to indicate whether it is possible to use the system, a button which will enable him to put the instrument into the dictate condition and a bar to be pushed when it is required to play back.

The central processing unit has an endless magnetic tape loop which will give 60 minutes of continuous recording and which is so designed that a typist may commence transcribing 12 seconds after dictation has commenced.

The transcribing unit has an indicator light which will remain on whilst the unit is switched on and whilst there is untranscribed dictation in the system, a combined On/Off/Volume switch, a tone control knob and a plug receptacle for the headset. The foot control will enable the

typist to recall as required or may be adjusted to repeat the previous one to six words each time a pause is made.

Optional extras include a remote telephone recorder to enable a dictator to use the system from an outside telephone; a three-selector control unit for use with multiple installations; a typist's transfer switch to enable either of two typists to transcribe from the unit; a transcribe module for re-recording into the system from a portable tape cassette machine; a priority control allowing a typist to transcribe urgent material out of sequence; and a distribution panel for use with from up to four 'Thought Tanks'.

Further information and details of prices may be obtained from the company.

Book News

STAFF RELATIONS IN THE CIVIL SERVICE—

Fifty Years of Whitleyism

By Henry Parris. *Published by George Allen & Unwin Limited, price* £4·10.

Abraham Lincoln said of a book: "People who like this sort of thing will find this the sort of thing they like"; and, as Dr. Parris recognizes, this book will have a special interest for British civil servants; and particularly for those who, like myself, were at the centre of Civil Service Whitley negotiations for very many years. But I am sure that it will attract a wider public—those from countries overseas, as far apart as Canada and Australia or as different as, say, Nigeria and Malaysia, who, over the years, came to talk about our Whitley system for dealing with all the different aspects of industrial relations. Much of what they were told, and a lot that was not known to most of us, or could not be put across in the time available, is in this book. Alas, because the book runs to less than two hundred pages, there are some topics on which much more could be written: for example, on Departmental Whitleyism and on the workings of Whitley for industrial civil servants. Perhaps Dr. Parris or others will, before long, go in greater depth into these other topics. History can be written from documents, but it can be brightly illuminated, if sometimes distorted, if the historian can talk, as Dr. Parris did, to people who had been engaged in the battles of *not* so long ago. Of the 11 people on Dr. Parris' advisory group, sadly, two, Mr. T. R. Jones and Sir George Honeyman, died before the book was published.

It is somewhat ironic that this book about staff relations in the

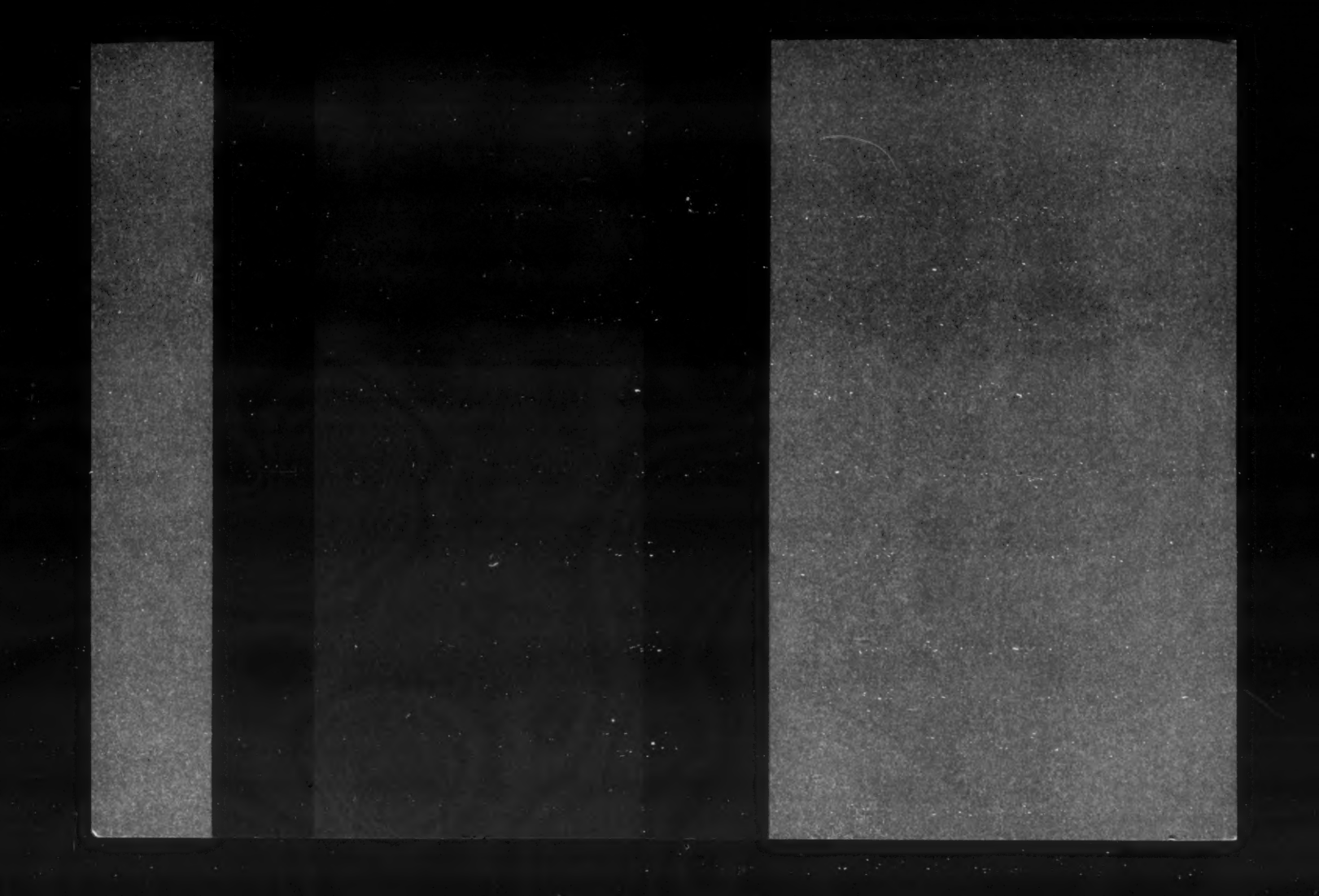
British Civil Service, a system ahead of its time, and still regarded as so by many overseas state services, should appear when the press is carrying news of industrial action by civil servants on a much wider scale than has ever happened before. But those who read the book will realize that the system of joint consultation and arbitration established so many years ago has survived a number of crises, mainly because it relies so much on consultation rather than confrontation and on a willingness on both sides to reason and not to rant. As Dr. Parris brings out in his last chapter, the fact that over the last 25 years or so the two sides have come very near to acting as a single entity has led to suspicions by more militant staff association officials that the cosier atmosphere has led to staff association officials becoming (I use a quote from Cyril Plant (p. 193)) 'part of the administration'. The reverse accusation has been made about the official side by those with slight knowledge of how the machinery works. Machinery is only as good as the people who use it. What Dr. Parris's book brings out is that the success of the Whitley system depends on mutual confidence in the integrity of the people on both sides, who have the difficult, but very rewarding, task of trying to sort out a problem in human relations. This book is a 'must' for those who labour in this field from the Prime Minister to the Branch Secretary.

J. J. S. S.

INTERNAL AUDIT IN THE CIVIL SERVICE (A/Cs Gen 39)

Published by Her Majesty's Stationery Office, price 57p.

STATISTICAL MODELS OF ECONOMIC RELATIONSHIPS (Civil Service College Occasional Paper 16)

By Ronald A. Cooper. *Published by Her Majesty's Stationery Office, price 15p.*

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